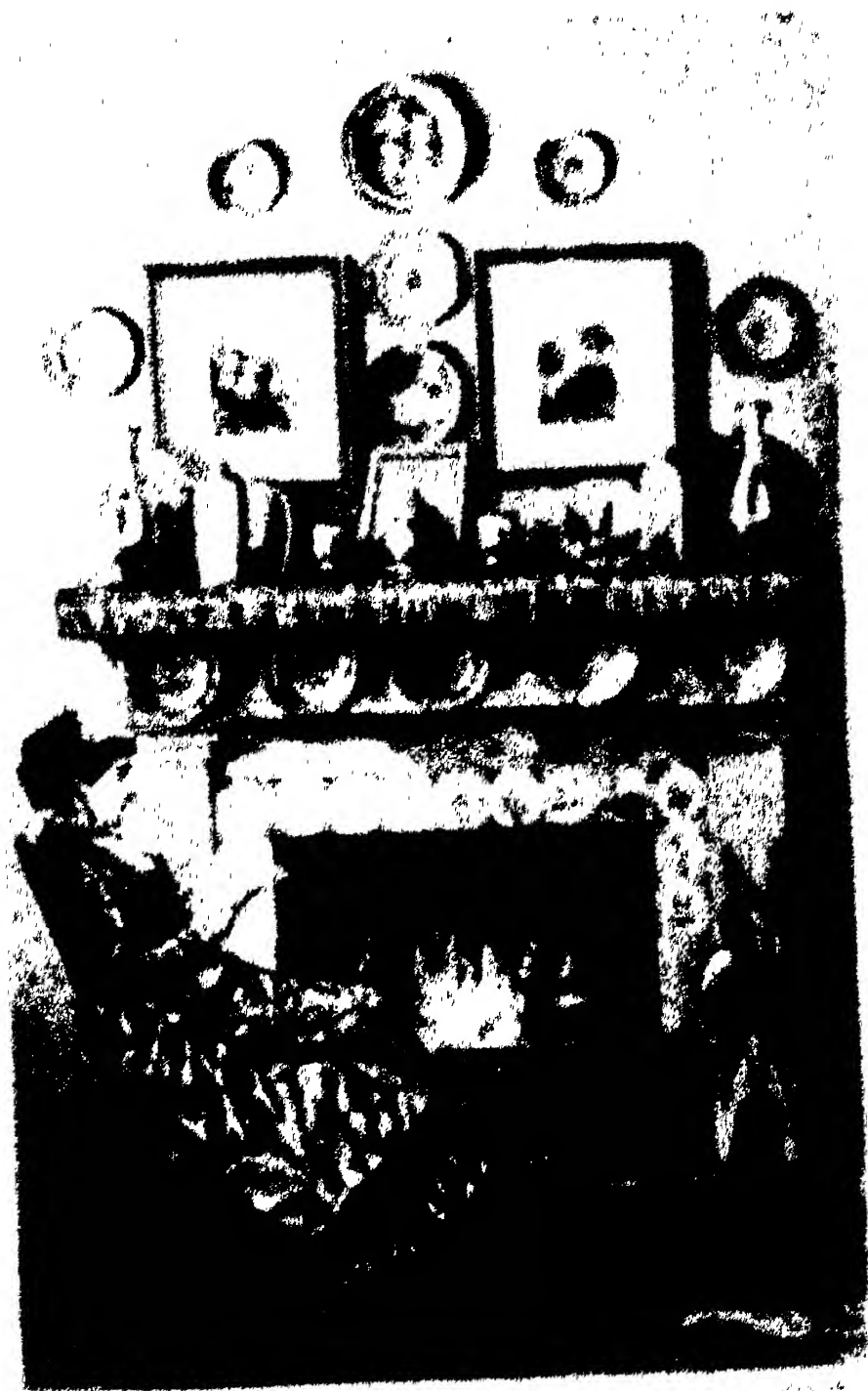


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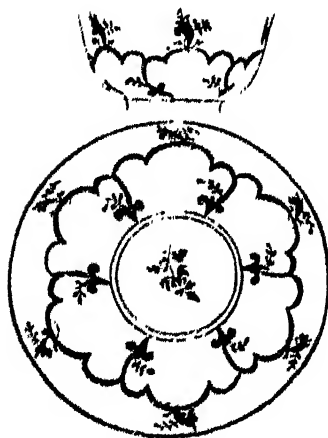


POTTERY AND PORCELAIN

OF ALL TIMES AND NATIONS

WITH TABLES OF FACTORY AND ARTISTS' MARKS
FOR THE USE OF COLLECTORS

By WILLIAM C. PRIME LL.D.



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P R E F A C E.

TEN years ago there were probably not ten collectors of Pottery and Porcelain in the United States. To-day there are perhaps ten thousand. The exhibition in public museums of the fine works of ceramic art loaned by the few collectors who possessed them, revealed for the first time to the American public the wealth of beauty which is in "old china;" and now in nearly every city, town, and village in the land more or less persons are "collecting."

The need of a book of the kind which I have endeavored to make has been manifest for some time. What to collect and why, how to collect and classify, are questions asked by many, and answered only by European works, in French and English, which indeed answer the questions better than this does, but are unfortunately inaccessible to the American collector outside of our larger cities.

The preparation of the needed volume has not been a voluntary undertaking with me. It was with extreme reluctance that I yielded to the urgent request of the publishers to make a book on Ceramic Art for American readers, students, and collectors. The very idea of a book for these three classes of people might well appall an author, looking at the vast extent of the subject. Those who are familiar with the art will appreciate the impossibility of bringing into one volume even a condensed sketch of its history for the general reader, much more a critical examination of its products for the student, and a descriptive account of characteristics and marks for the use of the collector. For this art is the oldest, the longest, the most widely diffused of all human arts. It has been used by every tribe of man, savage and civilized. Probably the first fire which Adam kindled on a clay soil taught him to make earthenware, and his descendants have ever since used the art he discovered. Its known history begins with the brickmakers on the plain of Shinar, and every year of this nineteenth century after Christ adds material for new pages.

The utmost that can be done with such a subject in one book is to relate briefly those portions of the history which seem most important to the American public who have not access to, or the time to read and study, the many learned and valuable works of Europe on the various departments of the art, and to add to this a

short statement of the date of foundation and the characteristics of fabrics of the factories whose products may fall into the hands of American collectors. This I have endeavored to accomplish. Much has, of course, been omitted which some will think ought to be found here, and space has been devoted to departments which others will think unimportant. Probably no author could avoid this. I have exercised my best judgment, seeking always to keep visible the connecting links in the long history.

No one will imagine that this book can be intended to supersede the learned and invaluable works of Messrs. BIRCH, JACQUEMART, MARRYAT, CHIFFERS, FORTNUM, and others, to whose investigations we are largely indebted for the sum of our present knowledge of ceramic art, and whose books have necessarily furnished a large amount of the material in the present volume. The student who begins the subject with what I furnish him will, of course, go to them as more thorough teachers. An attempt to give credit to each authority from which I have taken a statement so embarrassed the pages with foot-notes that I must express here my general indebtedness, to the authors above named especially, and also to others whose works are mentioned below; and this the rather that in many instances, finding the same important fact in the same words in various books, it was impossible to determine the proper credit.

The tables of marks and monograms at the end of the volume are based on Mrs. Bury Palisser's Hand-book, in European departments, and on the Manual of Messrs. Hooper & Phillips, in Chinese and Japanese art. The compilation of these extensive dictionaries is the result of the labor of very many students whose works are mentioned in the list below. The catalogue of authorities consulted is given not alone for the purposes of this acknowledgment, but also for the information of those who may desire to pursue the study of the subject. The attention now given to ceramic art is such that every public library should contain these books.

I have written on the theory that the reader knows nothing even of the rudiments of the art, and have tried to give a simple and intelligible account of the several departments, so that the book may be of interest and value to the inexperienced possessor of a few inherited specimens of old china or crockery, as well as to the laborious collector. In selecting specimens for illustration from my own and other collections, and from European works, it seemed to give greater practical value to the book to illustrate, generally, characteristic work of various countries and factories, such as collectors may hope to meet with, rather than curious, rare, and superb products of the art.

In expressing opinions, I have exercised that independence which I have sought also to inculcate in the American reader. The student has here excellent oppor-

tunity for forming independent tastes, since he is not apt to be guided by the established opinions which prevail where the subject has been long pursued, and collections have been formed according to prevailing ideas of beauty. Doubtless many will wholly disagree with the opinions expressed; and I have failed in my purpose if I have not impressed on the reader the importance, in art study, of forming opinions unbiassed by any dictatorial expressions of this or any other book. The study of art will do little good to those who profess to admire this or that specimen, class, or style, only because other people say it is admirable.

Prominent defects of this work are due to the lamentable fact that America possesses so few public collections of pottery and porcelain to which an author might from time to time refer. In Phenician and archaic Greek work the Metropolitan Museum of Art in New York has become the richest institution in the world by the acquisition of the Cypriote Collection of General L. P. Di Cesnola. The limits of this volume have forbidden an extended notice of those fabrics, and I have only attempted a general classification by styles of pottery and decoration, as an aid to their study, indicating briefly the new and important light which they throw on the early history of Greek art.

In Chinese and Japanese art, that museum has been happy in having for some time in the loan department the admirable selections from the collection of S. P. Avery, Esq., forming an illustrative exhibition not surpassed by any public or private collection elsewhere. The fine collection of Mr. Robert Hoe, Jr., has also been an important source of information.

In all other departments I have been compelled to rely on memories of European cabinets, and on my own imperfect collection, which is occasionally referred to as the Trumbull-Prine collection, which name it bears in memory of its founder, who was, so far as I know, the first lady, and perhaps the first person, in America who made a special study of ceramic art. This collection has enabled me, in departments in which it is peculiarly rich, to add some facts to the general sum of knowledge on the subject. Had I the assistance of her superior information, pure taste, and unerring judgment, this would have been a much more valuable book; for to them I owe all that I know of the subject. If my work accomplish any good or confer any pleasure, it is due alone to that memory whose constant presence has made it a labor of love.

W. C. P.

LONESOME LAKE CABIN, *August 8th, 1877.*

AUTHORITIES CONSULTED.

- BIRCH (SAMUEL), *History of Ancient Pottery*. London, 1873 [An exhaustive work, of the greatest learning and ability; does not include the late discoveries in Cyprus]
- BRONGNIART (ALEX.), *Traité des Arts Céramiques*. Paris, 1854 [In two volumes of text, and atlas of plates. A thorough treatise, with accounts of processes in various countries and factories, composition of pastes, preparation and application of colors, methods of manufacture, etc.; with historical notices.]
- BRONGNIART (ALEX.) ET RIOCREUX (D.), *Musée Céramique de Sèvres*. [A catalogue of the museum at Sèvres, with colored illustrations of many hundred specimens of ceramic art and glass. Valuable for reference. Early copies are the better colored.]
- BOHN (H. G.), *Guide to the Knowledge of Pottery and Porcelain, and Other Objects of Virtu*. London, 1857. [A catalogue of the Bernal-collection sale, with prices, and an appendix by Mr. Bohn, himself an extensive collector. Valuable as a reference for prices.]
- BINNS (R. W.), *A Century of Potting in Worcester*. London, 1865. [A new and enlarged edition, with additional plates, 1877. Large paper copies, with impressions from copperplates used for transfer-printing at Worcester and Caughley. A complete history of Worcester porcelain.]
- CAMPORI (G.), *Notizie, etc., della Maiolica e della Porcellana de Ferrara, etc.* Modena, 1871. [The Marquis Campori has rendered important service in elucidating the early history of porcelain-making in Italy in the sixteenth century, the first European porcelain]
- CHAFFERS (WILLIAM), *Marks and Monograms on Pottery and Porcelain, etc.* London, 1876. [Mr. Chaffers's work is indispensable to the collector. It is a marvel of patient and careful labor, continued from edition to edition, the latest, of course, always the best. He has condensed the marks in a small hand-book; but the large octavo is necessary to every student. We are indebted to it for much material in the present volume.]
- CHAFFERS (WILLIAM), *The Ceramic Gallery*. London, 1872 [Five hundred illustrations of pottery and porcelain. Important for reference.]
- DEMMIN (AUGUSTE), *Guide de l'Amateur de Faïences et Porcelaines, etc.* Paris, 1863. [A very good book of reference for factories, with descriptions of characteristics; especially thorough on Germany and Holland. Not to be relied on for ancient or American work.]
- DAVILLIER (J. C.), *Histoire des Faïences Hispano-Moresques*. Paris, 1861.
- DAVILLIER (J. C.), *Histoire des Faïences, etc., de Moustiers, Marseilles, etc.* Paris, 1863.
- DELANGE (H.), *Rassemblement de Toutes les Pièces Connues, etc., de la Faïence Française de Henri II. et Diane de Poitiers*. Paris, 1861.
- DELANGE, BORNEMAN, ET SAUZAY, *Monographies de l'Œuvre de Bernard Palissy, etc.* Paris, 1862. [Plates designed by Carlo Delange and C. Borneman; text by Sauzay and Henri Delange.]
- DELANGE, BORNEMAN, ET DARCEL, *Rassemblement de Faïences Italiennes, etc.* Paris, 1869. [Plates by Carlo Delange and C. Borneman; text by A. Darcel and Henri Delange. These superb works of luxury illustrate in colors some hundred specimens, many in full size of the originals.]
- DRAKE (W. R.), *Notes on Venetian Ceramics*. London, 1868.

- FILLON (B.), *Les Faïences d'Oiron*. Paris, 1862
- FORTNUM (C. D. E.), *Descriptive Catalogue of the Majolica, etc., in the South Kensington Museum*. London, 1873. [This South Kensington catalogue is enriched with colored plates and woodcuts, and still more enriched with Mr Fortnum's learned and clear notices of the Saracen and European potteries. It is the best single book for the collector in studying the origin and history of the Italian department of the art.]
- GRAESSE (J. G. T.), *Guide, etc., ou Collection Complète des Marques de Fabriques de Porcelaines et de Poteries, etc*. Dresden, 1873. [A convenient hand-book of marks, by Dr. Graesse, the accomplished director of the Japanese Museum, and other collections, in Dresden.]
- HASLEM (J.), *The Old Derby China Factory, etc*. London, 1876. [Devoted chiefly to personal recollections of workmen, contains colored plates of Derby patterns, and describes some products, omitting vases. Valuable for reference to colored plate of marks.]
- HOOPER (W. H.) and PHILLIPS (W. C.), *Manual of Marks on Pottery and Porcelain*. London, 1876. [An excellent and convenient little hand-book for the use of collectors, to which we are indebted especially for Chinese and Japanese marks, not before given in other works.]
- JULIEN (STANISLAS), *Histoire et Fabrication de la Porcelaine Chinoise, etc., augmenté d'un Mémoire sur la Porcelaine de Japon, par J. Hoffman*. Paris, 1856 [See text, p. 233.]
- JACQUEMART (A.), *Histoire de la Céramique*. Paris, 1875. [The collector will find in this work more information on the general and specific history of the art than in any other one volume. It has been translated and republished in England; but the original edition is the better, on many accounts. We are indebted to it for much historical matter.]
- JEWITT (L.), *Life of Josiah Wedgwood*. London, 1865.
- MARÉCHAL (A. A.), *Iconographie de la Faïence*. Paris, 1875.
- MARÉCHAL (A. A.), *La Faïence Populaire au XVIII^e Siècle*. Beauvais, 1872.
- MARÉCHAL (A. A.), *Les Faïences Anciennes et Modernes, etc*. Paris, 1873.
- MARÉCHAL (A. A.), *Assiettes à Emblèmes Patriotiques*. Beauvais, 1869.
- [The works of M. Maréchal are useful for reference, containing a large number of colored plates of ordinary wares of factories such as collectors are most likely to meet with.]
- MARRYAT (J.), *History of Pottery and Porcelain*. London, 1869. [The best English work on the general subject, to which we are indebted for much historical and descriptive matter.]
- MAYER (J.), *On the Art of Pottery, with a History of its Progress in Liverpool*. Liverpool, 1873 [Local history of Liverpool potteries.]
- METEYARD (ELIZA), *Life of Josiah Wedgwood*. London, 1865.
- METEYARD (ELIZA), *The Wedgwood Hand-book*. London, 1875. [Indispensable to collectors of Wedgwood wares; giving accurate descriptions, numerous private marks of workmen, and quite full catalogues.]
- METEYARD (ELIZA), *Memorials of Wedgwood*. London, 1874. [Next to the possession of the originals, the collector will enjoy the many exquisite illustrations in this elegant volume.]
- OWEN (H.), *Two Centuries of Ceramic Art in Bristol*. London, 1873. [Local history of Bristol porcelain and pottery.]
- PASSERI (G.), *Histoire de Peintures sur Maioliques à Pesaro et les Environs*. Paris, 1853.
- PICCOLPASSI. *Tre Libri dell'Arte del Vascio*. [MS. in British Museum, cited by various writers; and the French translation, published in Paris, 1860.]
- POTTIER (A.), *Histoire de la Faïence de Rouen*. Rouen, 1869 [Numerous colored plates.]

- PALLISER (Mrs BRYAN), *The China Collector's Pocket Companion*. London, 1855. [An excellent and convenient pocket hand-book, which the collector should have for constant reference. The marks and monograms here gathered are the basis on which the Table in this volume is founded, so far as they relate to European Fabrics.]
- ROBINSON (J. C.), *Catalogue of the Seals and Stamps*. London, December, 1876.
- ROBINSON (J. C.), *Catalogue of the Loam Productions*. London, 1862.
- SHAW (S.), *Chemistry of Pottery, etc.* London, 1843.
- SMITH (R. MURDOCH), *Pottery, etc.* London, 1876.
- TAINTSIEHER (A.), *Recherches sur les Anciennes Manufactures de Porcelaine et de la Céramique d'Alsace et de Lorraine*. Strasbourg, 1868.
- TREADEWELL (J. H.), *A Manual of Pottery and Porcelain for American Collectors*. New York, 1877. [The first American work on the subject. A compact sketch of the history. We are indebted to Mr. Treadwell for several illustrations in this volume.]
- WEDGWOOD (JESIAH), *Account of the Richardsonian Potbarn as seen with the various reproductions of its bas-reliefs that have been given by different authors. No plans or casts.* [This is printed by Mr. Wedgwood while preparing the moulds for his reproduction. The publisher requests information to be added, and in my copy, in Mr. Wedgwood's handwriting, this request is explained "that the account which he purposed to deliver with his copies of the *bas-reliefs* was as complete as possible."]
- WEDGWOOD (JESIAH), *Catalogue of Chinese, Japanese, Medals, Bas-reliefs, etc., for Sale at the Potbarn, and at his Rooms, in Greek Street, Soho, London, and at his Manufactory, near the Colne, in the North Riding of Yorkshire. Sixth Edition, with Additions.* Etruria, 1787. [A reprint of this catalogue has been issued in London, 1877.]
- WALLIS (A.) and HENNING (W.), *The Pottery and Porcelain of Herculaneum, etc.* London, 1840.
- WINKELMANN (J. J.), *Werke*. Dresden, 1808-'29.

Numerous other works which have been consulted are mentioned in the text. As this volume goes to press, I have received advance sheets of "Etruria, the Ancient Etruscan, Roman, and Temples," by General J. P. D. Guérard (London and New York, 1877), a book giving an account of his remarkable explorations, and of the highest importance to the student of Etruscan and early Greek ceramic and all other art.

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POTTERY AND PORCELAIN.

INTRODUCTORY.

Every man and woman should have a hobby. To the working-man, in whatever walk of life, it will prove a relief from labor, a change for the thinking faculties, a refreshment of mind, and such oblivion of the oppressions of daily toil as cannot be found otherwise. It will enable him to retire at will into a sphere of life and mental occupation wholly separated from business or professional cares, and to shut out from him all their anxieties. To one who has "nothing to do," a well-selected hobby affords the best of employment, since it gives life an object. No pleasure is more profitable than that found in surrounding one's daily life with works of the Great Artist or of man, arranged and classified in such way as to please the eye, afford instruction, or form material for intelligent study and examination. The refining influences which attend the formation of such collections are ample reward for time, labor, and money expended on them, if there were no other compensation. The sincere student finds in the pursuit occupation resulting in extended study of the history of nature or of man, and every fact which he learns is made clear to his intelligence and impressed on his memory by illustrative specimens.

No department of art history is more attractive or more remunerative to those who study it, or to those who gather a few specimens of human effort in it, than is that which forms the subject of this volume.

Pottery is the oldest, the longest, the most widely diffused of human arts. Its recorded history begins with the building of Babel; and great cities in all ages, notably all great American cities, are vast structures of pottery. It is its own historian. Ceramic collections are libraries of history, every specimen a book of the thoughts of men, of which the earliest known were published not long after the Deluge. Every people, civilized and barbarian, has practised the art in one or another form.

The first fire that was kindled on clay soil baked the clay, and would naturally suggest to the builder of the fire that he could thus convert a soft and easily moulded substance into a hard and permanent article of use. So it is not strange that savage tribes have made pottery. Accident might color the surface, and from such accident it was an easy step to the use of various colored clays and pigments, and thus to systematic decoration. The yielding clay would assume any form that the taste of the moulder might suggest, and the decoration would also indicate the taste of the sculptor or the painter, however rude their ideas and unskilled their ability in art. Whenever trade was established, and men made pottery for sale or barter, the forms and decorations would be such as were most likely to be acceptable to the people expected to purchase. Thus prevalent styles would be indications of public taste; and the work of the potter being permanent, the baked ware enduring for ages without change, the ceramic art takes precedence of others as the index of human character in various ages and countries.

A very simple illustration of this may be found in the examination of the potteries used by modern civilized nations. The porcelain and pottery used in Germany in the last century and early part of this century are characteristic. Those of France are characteristic. The pottery of the Saracens is characteristic. The products of Italy are characteristic. Each variety is peculiar in some respects; and, excepting the cases in which copies of one product are made in another country, each can be recognized, and each illustrates peculiarities of each people. On the other hand, if one were to seek from the pottery and porcelain found in American houses at the present day an illustration of American tastes, he would be puzzled to know what they are, would find no uniformity indicated; no prevailing styles of form or decoration would appear, and he would conclude correctly that the Americans are cosmopolitan in tastes, and depend on many other nations for their supplies of ceramic ware. For, as matter of fact, the people of the United States are English, German, French, Italian, or otherwise foreign by birth or descent, and have hitherto made little or no ceramic wares except articles for the most ordinary purposes of utility, and have established no American styles of art.

The ceramic art is thus important in ethnological investigations, and it is equally important, in the same way, because of its connected history, which serves as an index of the history of the race of man.

We will not pause to discuss theories of the origin of the race. Art study is a study of facts; and where theory is employed, it is, as it always

should be, merely a tool to be used in investigation and thrown away unless investigation changes it from theory to fact. A school-boy's theory is worth as much as a Newton's until proved or disproved by investigation. All study in every department of human art begins at a period not long after the Mosaic deluge. All art history, when traced towards its beginning, is found to commence at a time less than five thousand years ago. There is no work of human hands, no result of human thought, now known, whose date is fixed at more than 3000 B.C. The earlier dates assigned by some able men, in contradiction of equally able men, to the Egyptian monuments of the ancient dynasties are theoretic. The converging lines in the histories of all human inventions and arts, in tombs, in architecture, in money, in forms of religion, in language spoken or written, above all, in ceramic art, traced from their widest divergence towards their place and time of origin, point to the western portion of Asia as the place where, and about five thousand years ago as the time when, the history of man as read in his work must begin. The study of these arts, therefore, leads to the belief that prior to that time there were no men on the earth, or that a catastrophe of some kind had swept the major part of the race and their works from existence, and the remaining few began the history again in the western part of Asia.

The earliest mention of pottery in the Hebrew Scriptures is the account of the building at Babel. But the oldest known pottery is Egyptian. Evidence is abundant, and accumulating, that Egypt was colonized from Mesopotamia. It is probable that the art went thither with the colonists, but no examples of that early work in the Euphrates valley are now known. The line of the later history may be traced with considerable certainty. Unglazed pottery seems to be the fabric of all nations, and was made in many parts of the world as an independent discovery. It is through the line of glazed and enamelled potteries that the genealogy is most interesting.

That genealogy, briefly stated, is this: Men made brick and other unglazed pottery in Mesopotamia, and on the dispersion carried the art with them. The Egyptians discovered the art of enamelling and painting it with colors. Nineveh and Babylon, cities of a later age, received this art from Egypt, and applied it on a magnificent scale to the building of great walls of enamelled brick. The Phenicians at an early date learned to apply to the surface of pottery a thin varnish-like lustre, and transmitted this art to the Greeks. The Greeks, although in rare instances using the Egyptian art of enamel, do not seem to have liked it, and did not practise it generally, confining their ceramic art to unglazed wares, or those simply

painted and covered with a thin lustrous varnish, which is probably a true glaze. Even this art, handed down to the Romans, was lost in Europe, and with the decadence of the Empire the potter's art declined until, in a modern age, the Saracens, by their brilliant productions, roused the Christians to paint and glaze, and then taught them how to enamel pottery.

Persia probably received the art of enamelling pottery from Assyria, and transmitted it to China; China gave it to Corea and Japan. Whether Persia always practised it, or, having lost it for a time, received it again from the East, may be doubtful; but there is good reason to believe that it remained in Central Asia until found there by the Arabs, in the Mohammedan conquest.

It is not altogether certain whether the art thus found by the Arabs in Persia was that of enamel, or only the art of painting and glazing pottery, and this will not be determined until fuller knowledge is obtained by the ceramic history of Central Asia. It is by some supposed that stanniferous enamel was a later independent discovery of the Saracen potters, and it has even been suggested that the presence of tin in Spain led to the discovery there. On the other hand, many of those specimens of Saracen wares made in Asia which are supposed to be among the earliest are enamelled. Traces of the art appear in the Eastern Mediterranean and at Constantinople in the sixth century. From this obscure line, or from the Saracens, it is uncertain which, it extended along the well-trodden roads of communication in the Middle Ages to Germany, where it is found in the twelfth century, and was practised till the fourteenth. It seems to have been lost in Northern Europe not long before Italy received it from the Saracens in the fifteenth century.

The Arabs diffused the art wherever their conquests extended. It spread over Western Asia, along the northern coasts of Africa, from island to island of the Mediterranean, into Spain, everywhere practised by Saracen potters, until, in the middle of the fifteenth century, an Italian sculptor learned it, and Italy adopted it. Italian potters carried it into France. German potters who had either revived their own lost art, or received it afresh from Italy, diffused it through Northern Europe. Holland took it from Germany, and sent her potters to England to teach it there.

Meantime, about two thousand years ago, either in Persia or in China, was discovered the art of making pottery translucent, and producing what we now call porcelain. For sixteen hundred years this art was known only in Asia. In Venice, about 1519, an old potter made porcelain, and died without teaching a successor the art. In 1567 porcelain was

probably made at Ferrara. In Florence, about 1580, the Medicean laboratory made porcelain, but again the art was lost. In England, about 1671, a Fulham potter claimed to have discovered the art; but no specimens of his work are extant. At St. Cloud, in France, about 1695, the art of making a translucent pottery, such as we now call soft-paste porcelain, was found, and France began to make this ware. About 1710, at Dresden, in Germany, the Asiatic secret of making true, or hard-paste porcelain was discovered, and thereafter came the glory of Dresden in the one kind, and of Sèvres in both kinds, of porcelain.

Thus the cups on our tables are lineal descendants of the cups used by the ancestors of the builders of the Pyramids. A child is sometimes told to hold a shell to his ear and hear in it the sound of the sea. That same deep sound, which one may hear in any vase of Chelsea or Derby, Sèvres or Dresden, Minton or Copeland, coming down through a long succession of generations of pottery, is the roar of the Deluge.

All along this line of historic art which we have thus rapidly traced, sculpture and painting contributed to the splendor of the products. Everywhere, and in all ages, the results of the art were enduring monuments of national character, of the comparative civilizations, the refinement or barbarism, the ignorance or learning, of the races of men.

The forms and decoration of pottery afford a remarkable field for historic investigation, which abundantly repays the workman. In the Cesnola collection of Cypriote antiquities we have an unparalleled series of examples. Here is a local ceramic art, illustrated by thousands of specimens, covering a period which extends from more than fifteen hundred years before Christ to four or five hundred after Christ. The birth and childhood of Greek art are here exhibited. The lessons and influences received from Egypt at and after the date of the conquest of Cyprus, about 1500 B. C., are as visible on Cypriote vases as if written in Greek or English letters. The rude form of the early Phenician statuettes, resembling the mud figures made by modern children, are followed by more graceful figures, until the culmination is reached in that superb Greek art which has never been surpassed.

The origin and growth of well known designs in ornament, which have proved popular in all later times, and which have been found in use among various peoples, are traced in the ceramic history. The first Phenician decorations, in scratches, black lines, circles, checks, and diamonds, show early and simple forms. We find lines crossing lines, circles overlapping circles, and in these first forms we find the origin of the patterns called the Meander (which is the immediate result of the lines

in a check pattern), and of many of the beautiful curvilinear drop and leaf patterns commonly called Etruscan. It is worthy of note, too, that these universally popular patterns are found on the old pottery of nations whose arts show no other resemblance to the arts of Phenicia and Greece, and this doubtless because these ornamental lines are the natural result of straight and curved lines crossing each other, are simple patterns in origin, commending themselves to the eye when it first begins to seek methods of varying decoration. After these, and retaining these, styles of decorative art sprang up, suited to and characteristic of the various families of men. The Egyptians stamped on the forms of pottery imperishable illustrations of their wonderful mythology. The Greek fabrics glowed with thousands of illustrations of the gorgeous romance of Hellenic story. The Chinese spread over their enamelled wares a wealth of color surpassing gems in brilliancy, and rich with the chaotic imagery of Chinese religion and history. The Saracens interwove on pottery the luxuriant vines and flowers of the East, and made their mosques to shine in the sunlight resplendent with color. Assyria, Phenicia, Italy, Germany, France, England—every country has impressed or painted characteristic thought in or on the plastic clay, and burned it for a permanent record, to be studied and interpreted by generations of men.

I have thus far spoken of the importance of ceramic art as an aid to ethnological research. It is of equal importance as an aid to the historian, because it is frequently the bearer of historical facts, inscribed on it in lasting characters. The Babylonian and Ninevite libraries were pottery. Their books were plaques of clay, on which the letters were impressed, and the plaques, being baked, became such enduring pages of history that in this nineteenth century after Christ we find them as legible as when printed, and learned men are from day to day translating them into our language. Innumerable Egyptian records are found in hieroglyphic characters on the various potteries of that people. Greek story and history are abundantly illustrated on relics of Greek ceramic art. Wherever the Roman legions went, they carried with them the art of making pottery, on which they impressed historical facts, and from which the modern historian derives information otherwise unattainable. In short, it may be affirmed that next to the art of writing, and in connection with it, the ceramic art is of more importance to the student of history and of man than any and all the other arts.

The lover of pottery and porcelain needs no further argument to justify him in his hobby. But if it be suggested that all this does not go to justify the collection of modern works, he has abundant reason for his

pursuit in this, that no other art so fully gratifies the love of beauty. Standards of beauty are arbitrary. But the ceramic art conforms to any and every standard. The highest result of civilization may be said to appear in the best union of beauty with utility. Pottery and porcelain are thus the measure, as no other art can be, of comparative civilization. If we had no other evidence, we should rank the civilization of Japan as equal to that of Europe from the exquisite splendor, beauty, and delicacy of her ceramic productions; and that such is the proper rank to be given it cannot now be doubted. Almost all other beauty fades or decays. Flowers are beautiful, but short-lived, and oil or water paintings of flowers on paper or on canvas change and fade. I look up as I write to a bouquet of very common but very beautiful flowers, painted more than a century ago by a great artist, on a Dresden vase, and they gleam with all the beauty of a summer day, and will, unless the vase be broken, be as beautiful a thousand years hence, when possibly the flowers themselves will be utterly unknown except from just such paintings. A fragment of white porcelain is a gem; and if it were not a common ware, a white porcelain plate or cup would be as precious to a lover of beauty as the rarest vase of silver, gold, or jade.

Sculpture has found opportunity for its highest achievements in baked clay, and it is only because we are accustomed to see them in such common use that we are not enthusiastic in admiration of the beauty in form which domestic pottery and porcelain in table services constantly present to our view. Color, except in gems, is nowhere so brilliant and effective as in enamel, and many colors on enamelled pottery and porcelain are more brilliant and exquisite than in gems. The most cheerful household decorations are effected by the use of such colors on walls or in cabinets. Families brought up with such articles around them feel their civilizing and refining influences. Children grow up among them with knowledge, appreciation, and love of beauty. The table furnished with tasteful ware is bright, and ceases to be a mere feeding-place. Its memories become important possessions to the members of the family who go away. The dearest associations of old age with childhood are connected with the home table, whether its furniture was the rarest porcelain of China, or the simple and always beautiful blue-and-white crockery of Staffordshire. The lover of ceramic art and the collector of its treasures of beauty can afford to pity those who are unable to enter into the enjoyment which he is happy in possessing.

Technology.

Pottery, in the broadest meaning of the word, includes everything made by baking in fire or furnace, into the composition of which clay enters. Porcelain is a variety of pottery. Whatever restrictions we place on the meaning of the word *pottery*, all makers of wares consisting in whole or in part of clay, finished by baking, are potters, and all such wares are works of ceramic art.

The nomenclature of the art is somewhat faulty and lacking in exactness. It is unfortunate that we have not a separate name for each composition into which clay enters, so that the name *pottery* might be reserved as a generic name. We should then avoid the confusion arising from the use of such phrases as "semi-translucent pottery," "semi-porcelain," and other names applied to exceptional wares. But, in our day, there is a general distinction between pottery and porcelain, which it is too late to overcome. We must therefore accept the existing nomenclature, and endeavor to make it clear to the beginner in the study of ceramic art.

Objects made wholly or in part of clay and baked, which are opaque, are called POTTERY; those which are translucent are PORCELAIN.

Pottery is of two kinds—SOFT and HARD.

SOFT POTTERY is made of any ordinary clay. A common house-brick is the simplest illustration. It is of various colors, depending on the clay used and on the amount of firing. The more common colors are brick-red, and a creamy yellow or buff. It is easily scratched with an iron point or a file. Its fracture is rough and granular.

HARD POTTERY is made by the mixture of stone or sand with clay. The simplest illustration of this is a fire-brick. It is also of various colors, is not so easily scratched or filed, resists fire. Its fracture varies, being sometimes rough and granular, sometimes almost vitreous.

Soft Pottery is usually divided into four classes: UNGLAZED, GLAZED, LUSTROUS, ENAMELLED.

UNGLAZED POTTERY needs no description, but the reader will keep in mind the successive steps in the art of which it is the commencement, as illustrated by (1) an unglazed pottery dish, red, buff, or black, according to the clay and the amount of firing; (2) the same dish glazed; (3) the dish decorated with colors and glazed over the color; (4) the dish covered with opaque white enamel; (5) the dish thus enamelled and painted over the enamel, with or without a final glaze over all.

GLAZED POTTERY is pottery covered with a thin coating of glass. Dif-

ferent mixtures are used to form this glaze, the practical result being the same, that when the pottery covered with the glazing mixture is baked, the mixture fuses and forms a thin transparent glass, covering the ware and any painting which has been placed on it. Salt glazing, used on certain stone-wares, is produced by throwing salt into the furnace while the pottery is hot, the gases forming a chemical union with the sand in the clay, and producing a surface glaze. Most of the glazes are made with the use of lead and silex. Some glazes melt at a temperature equal to that required for baking the ware, others at a much lower temperature. Some wares are baked for the first time with the glaze; others are first baked unglazed, and afterward receive the glaze, which is vitrified by a second baking.

LUSTROUS POTTERY is that class which we find in ancient Phenician and Greek art, where the object is covered with a thin, varnish-like glaze which is so thin that an iron point easily penetrates it, and it does not always prevent the permeation of water. No analysis has been successful, and its composition is unknown. It is probable that the oldest known examples are on the red and black wares, with scratched decorations, found in Cyprus, and described hereafter. There is little reason to doubt that this lustre is an alkaline glaze. The distinction must be borne in mind between this ancient lustrous pottery and the modern fabrics of Italy and other countries, which, being decorated with ruby, copper, silver, gold, or platinum lustre, so called, are known as Lusted Wares.

ENAMELLED POTTERY is covered with an opaque substance, called enamel. This is composed of stone, sand, and oxides of lead and tin. The essential to an opaque white enamel is tin, which gives to it the name *stanniferous* enamel. Pottery covered with stanniferous enamel may be painted, and then glazed. Enamel pastes are colored, and applied with the brush as paint. When vitrified by baking, they usually produce a slight relief on the surface, differing in this respect from objects which are only painted in colors.

HARD POTTERY includes a large number of various wares made in modern times, known generally as stone-wares. The more important objects in hard pottery, formerly, were the stone jugs, dishes, and drinking-vessels classed as GRÈS. Common potteries for domestic use in stone-ware were abundant until the time of Wedgwood. Salt-glazed stone-wares abounded in England. The cream-ware, perfected by Wedgwood, was hard pottery. Other English potters added largely to the list by introducing various substances into the composition, and there are now many kinds of hard pottery known as stone-wares which are not classified.

PORCELAIN is translucent pottery. It is made by the union of two classes of substances, one class non-vitrifiable, the other vitrifiable, by heat. The result of the baking is a body which consists of the minute opaque particles of the substance which has not melted, held together by the translucent melted substance.

Porcelain is of two classes—SOFT-PASTE and HARD-PASTE.

SOFT-PASTE porcelain is divided by M. Brongniart into two classes, Natural soft paste, and Artificial soft paste. This distinction is not generally observed, and all soft-paste porcelains are commonly classed together. Natural soft-paste porcelain is made by the use of clay as the non-vitrifiable substance. The English soft-paste porcelains are mostly of this class; and the clay used in England being kaolinic, the porcelains are not uniformly soft, but vary in hardness according to the quantity and quality of the clay. Artificial soft paste is made by various compositions, the vitrifiable substances varying in different manufactories. Thus natural soft-paste porcelain was made in England by the use of Cornish clay, Cornish granite, calcined bones, sand, soda, borax, and oxide of tin. The artificial soft paste of Sèvres was formerly made by using nitre, salt, alum, soda, gypsum, sand, chalk, and marl. Soft-paste porcelain is known by the French as *pâte tendre*.

HARD-PASTE porcelain, or true porcelain, is made by the union of two substances, an infusible clay known by its Chinese name, *kaolin*, and a stone, felspar. Kaolin being an essential ingredient, it cannot be made where this cannot be obtained.

The difference between hard-paste and soft-paste porcelain is not always so perceptible to the eye as to the touch; nor in varying pastes, like the English, can it always be determined by either eye or hand. Soft-paste porcelain is in general soapy or oily to the touch, and can be easily scratched with an iron point. It has usually a less hard and cold glint than hard-paste porcelain. The glaze generally covers the entire object, including bottoms and bottom rims, which in hard-paste articles are usually unglazed. When doubt exists as to the quality of the paste, whether soft or hard, it may be determined by trying a fine file, which will not touch the hard paste, but readily cut the soft. This determination is often essential to the proper classifying of specimens, and the question of genuineness.

KAOLIN is a white mineral, found in various localities, always more or less mingled with other substances, which are as far as possible removed from it by washing. It is, according to Brongniart, a product of the decomposition of felspar. It consists of silica, alumina, and water

in chemical composition. It does not effervesce with acids, and, when pure and freed from the undecomposed particles of felspar usually found in it, it does not fuse at the highest temperatures of porcelain furnaces. It is found in China, in various parts of Europe, and is said to exist in abundance in America, in both the Northern and Southern States.

The kaolinic rock, or clay—that is, the mass as found which contains kaolin—is mined, mixed with water to form a liquid which flows from vat to vat, depositing foreign substances—sand, stone, and other minerals—and retaining the comparatively pure kaolin for final sediment. This is formed into bricks, and sent to the porcelain factories for use. The most thoroughly washed kaolin, however, is never free from some sand and other substances. Kaolinic clay has been used in the manufacture of soft-paste porcelains in various English factories; and the product of the firing approximates more or less to hard paste, rendering it sometimes difficult to determine the class.

Many authors, from the tenth century to the present time, use the word *porcelain* to describe all classes of glazed and painted or enamelled wares; and it is therefore, in many instances, impossible to know whether they speak of pottery or true porcelain. The French apply the word *faïence* to all pottery and porcelain; while the word, as adopted in English, excludes porcelain, and is by some writers confined to potteries decorated with colors. The word *majolica* is in general use to signify Italian enamelled potteries of the fifteenth, sixteenth, seventeenth, and eighteenth centuries. Mr. Fortnum, an authority entitled to high respect, proposes to confine it to what he believes its original meaning in Italy—wares like those of Maestro Giorgio, decorated with metallic lustre.

The practical methods of making pottery and porcelain form no part of the plan of this book. The briefest account of some of the simpler portions of the work will be all that its limits allow.

The potter's wheel is a revolving disk, or table, turned by the foot of the potter, by an assistant, or by machinery. In making pottery, the clay is softened with water to make it plastic. Water is only a tool in the process. The clay is thoroughly worked to uniform consistency. A lump, larger or smaller, according to the size of the vessel to be made, is thrown violently down on the centre of the wheel, which is set in motion; and the thrower, with thumb and fingers, curved sticks, knives, and other simple tools, shapes the vessel. Other forms are made in moulds. Relief ornaments for the surface are either engraved in the mould, or are moulded separately and placed on the object, and fastened with thin slip of the paste by way of glue. Handles, spouts, etc., are made sepa-

rately and thus fastened. Large bottles with small necks are turned in two parts, the lower portion first, the neck, widening out at bottom, next, and this is fitted to the bottom, and the whole turned and gently pressed together with slip, all trace of the line of union disappearing. Objects moulded in sections are similarly united. The objects being formed, are allowed to dry, and then baked. The forms of furnaces and the degree of heat required vary with different wares. Terra-cotta objects, so called, are very slightly baked, while hard-paste porcelain requires the highest heat. Good wares are baked in *seggars*, which are hard-pottery cases, capable of resisting heat and protecting the objects from smoke and cinder.

Pottery thus first baked may be painted with colors, then glazed, and rebaked, or may be glazed or enamelled, baked again, and then painted on the enamel, and finally baked.

The color decorations of pottery are either *engobes* (colored earths mixed with vitrifiable substances) or vitrifiable colors, which must be earthy or metallic. Vegetable colors disappear in the furnace. Blues are obtained from cobalt; greens from copper; reds from iron and gold; rose-pink from gold with silver and tin; browns from iron, antimony, lead, and manganese; yellows from antimony, lead, and tin; black from antimony, nickel, iron, and platinum; white from tin and arsenic. Various shades are obtained as in ordinary painting. The colors are usually prepared by grinding with enamel, so as to form a vitrifiable substance, which, however thinly laid on, actually melts into a colored glass. If this be laid on thick, it forms a true enamel; if thin, it is still enamel, but is commonly said to be only color. In addition to these colors, pottery and porcelain are decorated with metals, laid on in the metallic state, and with lustres, called metallic lustres. The glaze is prepared in a liquid form, of the consistency and appearance of cream. When the object is dipped into this, an opaque white coating rests on the surface which conceals all color decoration, but which in the furnace melts into transparent glass.

Porcelain objects, like pottery, are formed on the wheel, or in moulds. Thin objects are formed sometimes by pouring into the mould a liquid paste, thin as cream, which deposits its substance on the inner surface of the mould, the thickness depending on the length of time allowed for deposit. The remaining liquid is poured out, and the deposit left to dry in form. In drying, the paste shrinks and easily leaves the mould. At Sèvres thin vases are made by subjecting the paste thus deposited in the mould to atmospheric pressure by the use of the air-pump. Thin vases made without such pressure are apt to fall to pieces when the mould is

removed, and many moulds are sometimes required before a perfect vase is obtained.

Porcelain is often glazed at the first firing, which bakes the paste and melts the glaze at the same time. Generally European porcelain is baked before glazing, and receives the glaze or enamel at a second firing.

Painting on porcelain is executed as on pottery, with metallic colors, either under or over the glaze. Elaborate paintings are generally executed on the glazed or enamelled surface, and a third baking melts and unites the paint with the glaze or enamel. Paintings are frequently retouched and corrected by artists, and the object is baked again and again. Few ordinarily good paintings are executed without two bakings, and four, five, and more are often required for careful works.

The colors used on porcelain are of two kinds—those which will bear the highest temperature (*grand feu*), and those which will bear only the lower temperature of what is called the *mouffle* furnace. Of the first are cobalt-blue, chrome-green, and certain reds, browns, yellows, violets, and blacks. These colors may be baked with the porcelain at the temperature of *grand feu*, which is equivalent to 4717° Fahrenheit. More delicate colors are baked at the heat of the *mouffle* or enamel furnace (*demi-grand feu*), which is about 1300° Fahrenheit.

Gilding and metallic decorations are generally effected by placing the metal on the surface in an amalgam, and, after baking, burnishing.

Metallic-lustre decorations are effected by a variety of processes. The most celebrated are those of the Saracens and of Gubbio, in Italy, which will be described hereafter. Platinum has been extensively used for covering pottery with a surface resembling silver or burnished lead, and this is ordinarily called silver lustre. Silver is rarely used for decoration, as it becomes black with exposure, and requires constant polishing.

Printing, or, as it is sometimes called, transfer printing, on pottery and porcelain was first practiced about 1756 at Liverpool, where it was probably invented a few years previously. A copperplate engraving is printed on paper, the paper then laid on the surface of the article to be decorated, and gently pressed, so as to transfer the ink from the paper to the object. A variation of this process was shortly afterward invented, known as bat-printing. In this oil was used instead of ink, and prepared sheets of gelatine, instead of paper. The oil being transferred to the surface of the object, the color was dusted on in powder, adhering to the lines of the print. In modern times decoration by printing has been brought to a perfection equalling that of chromo-lithography. Many of the old printed wares were touched up with colors by the brush. Modern

improvements have been made in some of the old processes of ceramic manufacture; but as this is not a technical work, they cannot be described. Wedgwood introduced the lathe, for turning and polishing work—an instrument previously in use only in China and Japan. Machinery has been successfully worked by steam and other power in modern potteries, even to the extent of moulding the more common classes of ware. But it still remains true, after thousands of years, that beautiful products of the potter's art are, like paintings on canvas and marble statues, the work of artists; and the highest achievements in the art demand the greatest artistic powers, in moulding forms and managing colors. The decoration of ceramic wares is quite extensively practiced, for artistic amusement, by ladies and others, in Europe and in this country. The paints prepared for the purpose can be purchased in the shops, and a little experience will enable any person who can paint on paper or canvas to decorate pottery or porcelain. There are furnaces in New York at which the wares painted by amateurs are baked, and many of the dealers in porcelain furnish white enamelled plaques, and unglazed pottery vases and dishes, for those who desire to decorate them.

PART I.

ANCIENT POTTERY.

I.—EGYPT.

ABOUT 2700 B.C., after the dispersion of the family of men in the Euphrates valley, a small number found their way along the shores of the sea, or pushed an adventurous expedition through Arabia across the deserts, and discovered a land of abundant fruitfulness, watered by a mighty river, and dark with the green foliage of fruit-bearing palms. The beasts of the field and the birds of the air had preceded them. Food was abundant. Nature was lavish in her gifts. The sunshine was perpetual, scarcely a cloud obscuring it—only those vast silvery clouds of millions of water-fowl of every species, then, as until within our own memory, floated and circled in innumerable quantity and variety through the day, making Egypt, from sea to cataract, a “land shadowing with wings.”

The small colony increased with great rapidity. Either the peculiarity of their life, or hereditary ability, rapidly advanced them in the arts above the rest of the human family, from whom they were isolated by sea and desert. The natural surroundings, the birds above, the luxuriant flowers and foliage of the vast morasses in the lower country, the solemn, barren mountains on each side of the narrow valley, entered into their conceptions of beauty and guided their imaginations. They retained the monotheistic religion of their ancestors for several centuries. In a very short time, without immigration, their numbers increased, by ordinary generation, to millions. The patriarchal form of government became a monarchy. The monarchy had its vicissitudes, was divided and reunited again and again, but the national civilization remained pre-eminent for twenty centuries. Their wise men were learned. The whole population were well educated. Whatever was important in history was recorded for all the people to read. Books,

poetry, philosophy, history, abounded. When at length they came into contact with other races, their superiority imposed on these the characteristics of Egyptian art. But the end of this long and unparalleled history came. From the land of their common origin, the Persians descended on the Nile valley, and overthrew the monuments of the Egyptians.



Egyptian Scarabæi: 1. The back; 2. Side view; 3. Engraved bottom; 4. Scarabæus, with cartouche of Amunoph, 5. Scarabæus, with cartouche of Thothmes III.

The Greek civilization, which Egypt had nurtured in its childhood, overcame her by force of arms, without compensating her with the gifts of Greek art, and the national existence perished under the exhausting sway of avaricious Rome.

Centuries afterward, on the sands of the desert along the Nile valley, the exquisite creations of a new art, coming again from the Asiatic home of the race, sprang up in the sunshine to mark the burial-places of Saracen rulers of Egypt; but, too beautiful to endure, are now melancholy ruins, splendid even as they crumble to the desert sand.

The student of ceramic art has reason to be interested in the history of Egyptian art. No other in ancient times was so powerful or had such influence in the department of our present study. Each new discovery which is made leads towards the conviction that the art of enamelling pottery, which has been, wherever known, the highest means of uniting beauty with utility, first invented by the Egyptians nearly or quite four thousand years ago, has never been practised by any nation which did not, directly or indirectly, learn it from them. This example of an art never wholly lost out of the world for four thousand years—an art which contributes so much to the civilization and refinement of the race—has deep interest to the student.

Without entering on the discussion of disputed questions of Egyptian chronology, the settlement of Egypt may be placed at about 2700 B.C., and the building of the Pyramid of Shoofoou or Cheops at about 2350 B.C., dates sustained by the combined results of the study of Egyptian art,

the records of the monuments, and the agreement of the ablest English-speaking archæologists. It may be noted, in passing, that the school which has heretofore held to dates of extreme antiquity has rapidly shortened the long term of Egyptian duration formerly claimed; and Mariette Bey, of that school, the most experienced of modern Egyptian explorers, if not the most trustworthy reasoner, places the settlement of Egypt at 5004 B.C., and the dynasty of builders of the Great Pyramids at from 4235 to 3951 B.C.

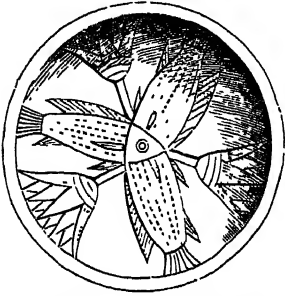
While Egypt furnishes abundant relics of art of her ancient periods, growing fewer in number, and proving the simplicity of both arts and religion in the earlier times, there are no monuments with dates which make it possible to locate them exactly in contemporaneous history, or with reference to modern methods of computation, prior to the eighteenth century before Christ. An astronomical occurrence recorded in the reign of Thothmes III. has enabled astronomers to locate that event at 1445 B.C., but this result is rendered somewhat doubtful by contradictions in dates derived from later astronomical events recorded.

In commencing the history of pottery in Egypt, it is necessary to examine a statement, widely credited, which places the existence of pottery at a remote period. The learned Bunsen, in the preface to the third volume of the English edition of his great work, "Egypt's Place in History," falls into an error the more remarkable on account of the learning and accuracy which characterize his observations in general. This error has been fraught with evil consequences in the wide influence it has exerted towards unsettling faith in the Mosaic records. It is worthy of distinct note that other errors of similar nature have been made by many persons who have argued in favor of the extreme antiquity of the human race, and it is of the utmost importance to the student that he should examine with extremest caution, and accept only on the most complete evidence, statements of the occasional discovery of works of human art, or bones of human frames, in localities indicating an antiquity far beyond that of the ordinarily known and numerous relics. The study of art is a study of facts, and its conclusions are not to be rejected on the faith of theories—especially of geologic theories—so many of which are vague and unsupported by sufficient evidence.

The Chevalier Bunsen's argument is briefly this: At Mitrahenny, a village among the palm-trees which now cover the site of ancient Memphis in Egypt, lies, half buried in the soil, a colossal statue of Remeses II., who reigned in Egypt about 1800 B.C. The statue was doubtless erected by him, and was one of the wonders of Memphis in the days of her mag-

nificance. When the Persians conquered Egypt, they overthrew this colossal monolith, and it has lain in fallen grandeur from that day to this.

This spot where the statue lies was selected for borings in the soil. Mr. Homer, the English officer who conducted the examinations, selected



6. Egyptian Blue-enamelled Pottery Cup.

the spot because the presence of the statue assured an undisturbed earth for at least three thousand years. The accumulation of earth by annual deposit of the Nile since its erection had been nine feet four inches in the period (which Bunsen places at three thousand two hundred and fourteen years), which gave an accretion of three and a half inches per century. This regular accretion and consequent rise of the level of Egypt is a well-settled fact. At the depth of thirty-two feet was found the

sand, underlying the Nile deposits, and from this depth was brought up pottery, the work of human hands. The argument on its face seemed clear to a child that thirteen thousand five hundred years had elapsed since this pottery was left there by living men; and Bunsen says, "This result is historical, not geological. The soil is exclusively historical soil, coeval with mankind, and underlies a monument the date of which can be fixed with all desirable certainty."

But, unfortunately for the learned German's conclusion, he forgot that if the soil is "exclusively historical, coeval with mankind," its history should be examined; and, overlooking this, he assumes that it is geological, the deposit of nature working through the Nile overflow. The soil is historical, and its history is quite plain to all who have examined the monolithic colossi of Egypt.

There are remains of several of these colossi not far apart at Mitrahenny. They were each from thirty to fifty feet in height, gigantic monoliths, such as no nation but the Egyptians have erected. They were cut and finished in quarries, nearer or more distant, as the quality of stone determines. They were transported on mighty floats along the Nile, and great canals were cut from the Nile banks, to lead the floats to the place of final deposit. Here the Egyptians, architects who built for eternity, believing in all probability that they would return some day in the flesh to worship again in their temples and find their monuments unharmed by time, made great excavations through the alluvial and into the underlying sand, and laid firm foundations for the vast weights of stone. If different

colossi at Memphis were erected at the same time, as is probable, the canals extended in various directions. Around each site of the foundations the excavations were practically small lakes, and coffer-dams were essential, for the Nile water percolates the alluvial. The work done, the statue erected, the earth was filled in, and Memphis grew over it. Such is the historical soil through which the borings were made; and the pottery found was the broken pottery of the workmen who built the foundations three thousand two hundred and fourteen years before the fragments of their water-jars were recovered to puzzle modern men with the notion that they had lain more than a century of centuries under the Nile deposits.

In fact, so thorough has the canal system of Egypt been, for the purposes of irrigation, from the earliest dynasties—the canals always descending to the lowest Nile level, and, when abandoned, filling up with soil in a few years—that excavations in Egyptian alluvial must furnish exceedingly doubtful results, wherever made.

The fact which may be placed on record in this connection is, that pottery, the first and the most enduring handiwork of mankind, has never been found yet which can be with reason assigned to an origin as early as 3000 B.C.

Egypt made pottery before the building of the Pyramids. This is evident from the presence in older hieroglyphic writing of characters which are pictures of earthen vessels. Pictures of pottery vessels and small pieces of pottery have been found in tombs of the Fourth, Fifth, and Sixth Dynasties, contemporary with and after the building of the Great Pyramid (about 2350 B.C.).

The art of covering pottery with enamel was invented by the Egyptians at a very early date. They applied it to stone as well as to pottery. Although it is not customary (except with the Chinese) to class in the ceramic art enamels on any other than earthen bodies, the enamelled stone of Egypt is so closely related to the enamelled pottery of Egypt that it must be considered with it.

Steatite (or soapstone, as some varieties are called) is easily worked, and bears great heat without cracking. From this material the Egyptians carved small pieces—vases, amulets, images of deities, of animals and other objects—and covered them with green, blue, and occasionally red, yellow, and white enamel, which when baked became brilliant and enduring. Objects in enamelled steatite are known of very early periods.



7. The God Anubis. Enamelled steatite.

One in the Trumbull-Prime collection, obtained at Thebes—a small cylinder—bears the cartouche of a king, Amunmhe III., of the Twelfth Dynasty, the Moeris of history, whose date is placed at about 2000 B.C. The enamel is pale-green, almost white, except in the engraved lines, where, being thicker, it shows more color.

In the Louvre collection, a cylinder of this material bears the name of Shafra, a king of the Fourth Dynasty, builder of the second pyramid; and the British Museum has three which have the names of kings and of a queen of the Twelfth Dynasty. The manufacture of this material was carried on till the time of the Ptolemies.

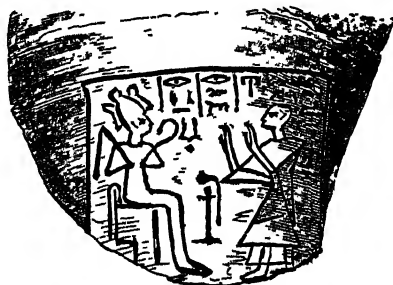


8. Pottery Flasks found at Thebes.

The knowledge and practice of this art at the time of the building of the Pyramids necessarily imply that the Egyptians could enamel pottery also at that early date. It is, in fact, impossible to say that there are any known specimens of unglazed pottery older than specimens of glazed and enamelled pottery.

The histories of the two classes therefore begin together.

The Egyptians made two kinds of pottery—the one, ordinary soft pottery; the other, a coarse, gritty compound, loose in its character and lacking cohesion, sandy, easily crumbled, very white, but always covered with a strong glaze or enamel. This material was chiefly used for small objects, seldom for vases. We found at Thebes, in 1856, a fragment of a vase of this ware (Ill. 9) which must have been nearly a foot in height, which is covered with a thick white stanniferous enamel, and decorated with figures and hieroglyphs in purple. There are smaller vases in our collection, amphora-shaped, of the same material, measuring from four to six inches in height. Cups and bowls were formed of it, on which figures were painted in color



9. Fragment of Egyptian Vase. White enamel; figures, etc., purple. (T.-P. Coll.)

generally in black, and also lotus-flowers and other Egyptian emblematic designs. These pictures are usually in outline, rude in execution, much inferior to the work of many Egyptian artists who painted on stone or

on papyrus. The beauty of the enamel on these objects has been the envy of potters in modern times. The blue has never been surpassed, if, indeed, it has ever been equalled. Objects three thousand years old retain the splendor of their original color; and this leads to the inference that the variety of the shades of blue found on them is not the result of time, but the original intent of the makers. These shades vary from the most intense *bleu-de-roi* and pure turquoise to pale-blue tints approaching white. The color is usually remarkably uniform on the object. Several of the rare colors of old Chinese porcelain are thus found in ancient Egyptian enamels. The same enamel was occasionally applied to soft pottery.

Of unglazed pottery Egypt produced several varieties. The most common was the ordinary red, cream-colored, and yellow, sometimes in the later periods, under the Greeks and Romans, polished so as to appear like lustrous pottery. Another variety of pottery found in Egypt has a creamy-white surface resembling pipe-clay, the paste very hard and compact, the surface polished, and presenting almost the appearance of stanniferous enamel not perfectly white. It may be questioned, however, whether this ware was made in Egypt. It is abundant in Cyprus, and it is possible that objects found in Egypt were imported from Cyprus. After the Egyptian conquest of Cyprus, about 1440 B.C., and even at an earlier time, the two countries may have interchanged products.

It is not certain that Egypt ever burned brick. The absence of rain in that country made it unnecessary. Sun-dried brick were used for the construction of houses and walls, and the fact that to the present day thousands of these bricks retain their form and position, and even the stamps of the kings in whose reigns they were made, shows how useless burning would have been. It is supposed by some authorities that the burned brick which are occasionally found are the results of accidental fire. Others suppose that bricks were baked when intended for use in wet places. For ordinary purposes, the Egyptian brick were mere masses of sun-dried Nile mud, moulded usually of a large size, sometimes 20 inches long, more commonly smaller; seldom, however, less than $13\frac{1}{2}$ inches by $6\frac{1}{2}$ by $4\frac{1}{2}$; sometimes strengthened by the admixture of cut straw, used as modern plasterers use hair in mortar.

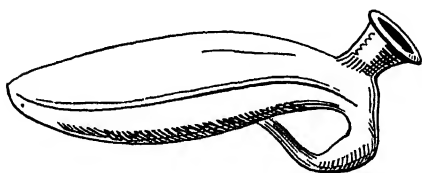
The forms of Egyptian pottery were numerous. Vases were made chiefly for use, and not for ornament. The amphora, in Egypt as in all ancient countries the most common and most useful vase, was made in all sizes, from the three-inch oil or perfume holder to the immense jar of three or four feet in height, for holding water, wine, oil, or grain. The

pithos (so called by the Greeks), an immense tub, cask, or vase of pottery, was made in Egypt as in all the Oriental countries. It was the household cellar, in which meats and provisions were stored. This was sometimes six feet in diameter, always made of coarse unglazed pottery.



10. Egyptian Wine-press, showing Amphoræ. (From sculptures at Thebes)

The highest art was displayed in the smallest articles, whether of soft pottery, or of the sandy paste before described. Images of deities were moulded in fair style or beautifully carved from steatite, and enamelled with the brilliant blue or green. The scarabæus—the amulet which signified, as some suppose, creation; as others think, resurrection—was made in pottery as well as steatite, with different symbolic variations, but hav-



11. Small Pottery Bottle.

ing the same general form. Among our specimens is one with the head of an asp; another with the head of Isis; another with the head of a ram, each a work of admirable art. One is of soft pottery, bearing the cartouche of Amasis, 570 B.C., and is a specimen of unusually fine workmanship. The wings are open-work, formed of asps engraved; the back is the head of Isis; the head a ram's head. A scarabæus in the possession of Mr. Charles Dudley Warner, at Hartford, is skilfully engraved with a life-like head of a hippopotamus. In our collection are crocodiles, snakes, hawks, apes, lions, fish, frogs, cats, a great variety of animal forms, which were made chiefly for ornaments or amulets. Beads and bugles in various colors and shapes were common. It was customary to wrap the dead in shawls composed of net-work, made of bugles and beads with amulets attached.

Bugles are often ornamented with spiral lines differing from the general color—black on green, purple on blue, etc. Beads were made globular, angular, oblong, flat with serrated edges, and of other shapes—blue, green, red, and yellow in color.

Enamelled pottery was also used for inlaying purposes in ornamental work. Small tiles, two inches by one, were used in the Pyramid of Sak-kara, as in modern chimney decoration. In the Abbott collection (New York Historical Society) and in the Trumbull-Prime collection are numerous specimens of pottery which have been thus used. In the latter collection is an unusually large plaque, $4\frac{1}{2}$ by 4 inches, the eye of Osiris (as this design is ordinarily called) being indicated on it in raised lines, the whole covered with a rich dark-green enamel.

At Tel-el-Yahoudeh are the remains of a temple, built of crude brick, whose walls were once covered with tiles of a remarkable character, bearing on them the hieroglyphic history, with illustrations, of the deeds of Remeses III., about 1200 B.C. The legends on these are sometimes impressed in blue tiles and inlaid with colored glass. Others have yellow grounds, with impressed legends inlaid in color. Yet others have relief figures of prisoners captured by the king, their dresses and hair inlaid in color.

The ancient Egyptians used pottery for burial purposes, to contain those interior parts of the body which were removed before embalming. Four vases, which were sometimes deposited with the mummied body, contained the stomach, the heart and lungs, the liver, and the smaller intestines. These were generally made of stone, but sometimes of pottery. Examples are in the Abbott collection in New York. Besides these, large numbers of smaller objects in enamelled pottery were deposited with the dead. The most common were those now called Osirian figures, usually representing mummies. These are of various sizes. Many so closely resemble each other in work, and in the hieroglyphic legends painted or impressed on them, that it seems probable they were objects kept in stock by the potters for sale to purchasers for funeral purposes. They are found both unglazed and enamelled, in red pottery and in the hard, gritty pottery before described. Those which represent the person with a long robe, as in life, are more rare, and are believed to be the more ancient. It was also common to build into the walls on the interior of tombs cones of pottery, six to ten inches in length, the bases standing out, on which were engraved or



12. Egyptian Blue-enamelled Vase.

impressed, before baking, legends relating to the dead occupants of the tomb. These cones have been found in great numbers, and much important information has been derived from the inscriptions on them, which usually contain the name of the deceased, his titles, the offices which he held, and expressions appropriate to funereal purposes. These were formerly supposed to be stamps for seals.



13 Ancient Egyptian Pottery. (From a tomb at Beni-Hassan.)

The Egyptians possessed the potter's wheel from an early period, as appears from a painting on the wall of one of the tombs at Beni-Hassan which are of very ancient date, not far from that of the Pyramid of Shoo-fou. The art of forming circular objects on the wheel has scarcely advanced a step for four thousand years; and the Beni-Hassan picture, from which we reproduce an extract (Ill. 13), is practically useful to instruct modern students in the industry in every pottery where the common wares—pots, pans, jars, and mugs—are made. Sometimes now the wheel is turned by the foot, sometimes by a boy, rarely by machinery. The lump of clay was then, as now, thrown down on the wheel, to be shaped by the hands and fingers; and the modern custom of doing the same has given to the English potter who actually shapes pottery with his own hands the name “thrower,” and to the art the expression of “throwing” a piece.

The influx of Greek art and Greek tastes under the Ptolemies rapidly brought to an end the continuous succession of pure Egyptian art,

which had been very much the same for two thousand years. The pottery of the later periods was not materially different from the common pottery of Greece. None of the higher classes of Greek artistic pottery were made in Egypt. The decadence of the art in Greece after the third century before Christ was marked; and Egyptian potteries indicate the same decay. With the Roman power came Roman art, which in pottery was, in the main, of a low class.

The practice of burning the dead which the Greeks introduced led to the use of pottery for the ashes of the dead. In the year 1855 we examined a great number of tombs in a very extensive cemetery then lying to the eastward of Alexandria, now covered by the modern growth of that city, and found many vases and lamps of Egyptian pottery of the Greek and Roman periods. One tomb alone contained over a hundred vases in a decayed condition, all of common red pottery, unglazed, without decoration, except now and then a few lines of black on the red clay. A vase, taken from one of these tombs (Ill. 14), will serve as an illustration of the later Greek style in Egypt. This vase we found sunk in a square cavity, only large enough to hold it, in the rock floor of a tomb. It was closed by a disk, cemented in the orifice, and contained bones and ashes.



14. Græco-Egyptian Mortuary Vase. (From tomb at Alexandria.)

The New York Historical Society possesses, in the Abbott collection, a very extensive illustration of Egyptian pottery and enamels of all periods. Besides a great number of figures, amulets, scarabæi, and small objects in steatite and pottery, this collection exhibits various forms and decorations of vases, bottles, etc. There are several bottles in the blue enamel, which are of the form now called "pilgrim bottles," a flattened-egg shape, having a small neck, and two small strong handles for a string to pass through. Two are in their original wicker cases, indicating the care which was taken of them. A curious vase is shaped in general like the kanopos, the funeral vase for holding the intestines, etc., before described, but, instead of having a movable cover, is in one piece, the top a hawk's head. This is soft pottery, nine inches high, enamelled with tur-

quoise-blue. On the front are two cartouches in black, one containing the prænomen of Osorkon I., of the Twenty-second Dynasty, about 968 B.C. This king was son of Shishak, the spoiler of Jerusalem in the days of Rehoboam. For some years past, this vase has presented a remarkable appearance in the glass case in which it stands. It is completely covered by a growth of fine hair-like spinels, of a transparent crystallization over a fourth of an inch in length. This is not an uncommon occurrence with Egyptian pottery, proceeding from the impregnation of the ware with nitre, or other salts, abounding in Egypt.

A small vase, of cream-colored pottery, is decorated with a rude indication of a human face made of small lumps of clay for eyes and nose, two arms at the sides, two horns above. Mr. Birch supposes this decoration to represent the god Bes, and the vases thus ornamented to be of Roman time. The Greeks and Romans called these vases Besa, from the image on them. Those who are fond of coincidences in art find remarkable resemblance between these vases and some of Central American fabric in our collection.

A fish-shaped bottle in red pottery is curious. Pilgrim bottles, as in enamel, are here in red pottery. Characteristic Egyptian decorations will be found on large, coarse vases in dashing lines of red and black. The red of the Egyptians can hardly be mistaken, although closely imitated in Cyprus. A still more characteristic decoration is that on small vases, where the pottery is marbled with red in rough daubed lines over the surface, rectangular spaces being filled with hieroglyphs in black. A remarkable vase—a jug of buff-colored pottery—with large, globular bulb nearly a foot in diameter, a short neck, from which a straight spout projects horizontally, with handle opposite, is decorated in black with one design often repeated, which might well be taken for a cuttle-fish with its arms extended in divers folds. The leaf ornaments around the neck indicate a Greek period.

The cover of the upper half of a mummy-case, in unglazed red pottery, in the usual form, representing the face and shoulders of a person, is a noteworthy specimen. The face is colored yellow, apparently before baking; the head and all the exterior are colored yellow, with red and black faintly intermingled, the inside remaining red. Holes through the edges are for fastening down this cover on the sarcophagus, which was perhaps also of pottery. The interior shows the numerous finger-marks of the workman in the soft clay while pressing the face into the mould.

That the Egyptians possessed tin at an early period the abundance of bronze objects fully attests. Their knowledge of oxides of metals is

shown in various ways, notably in the colors employed in decorating pottery. At the period of the Exodus we are told that the Israelites were directed to purify the gold, silver, brass, iron, tin, and lead taken from the Midianites. Tin might have been obtained from India, as there is abundant evidence of Egyptian commerce with those countries at least fourteen hundred years before Christ.

The glaze sometimes used was evidently not stanniferous, neither does it show the presence of lead. It was siliceous, and the color was intermingled with the glaze. Small objects are found in which the color seems to have been mixed with the clay, and unbaked beads of soft clay, colored deep-green, have been found in Egypt, and also in Cyprus, whither they were probably exported from Egypt. The green and blue colors were probably obtained from copper; the red, which is more rare, from iron; the yellow from silver; the purple from manganese or gold; the white from tin.

Lamps are found, probably of Roman time, covered with a hard green glaze, much crackled, and presenting a singular resemblance to Chinese enamelled potteries. Lamps of red and buff-colored pottery of the Roman period, down to the fourth century of the Christian era and later, abound. Christian inscriptions, designs, and symbols on these lamps are frequent. A toad was a common form of the top of a lamp. We have several of this form in bright-red pottery. Names of saints, crosses, the labarum, religious sentences, are frequent ornaments. On one, a red-ware lamp in our collection, obtained in Egypt in 1856, is an inscription, remarkable as a rare instance of apparent quotation from the New Testament. It is:

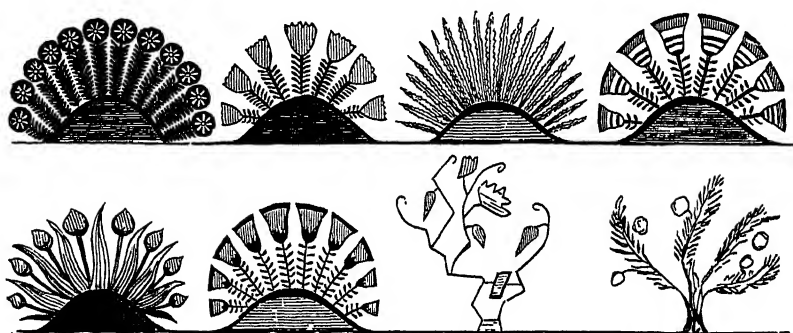
ΠΙΣΤΙΣ ΕΛΠΙΣ ΑΓΑΠΗ ΔΙΚΑΙΟΣΥΝΗ

(Faith, Hope, Charity, Righteousness).

Broken pottery was extensively used in Egypt for ordinary writing purposes. At Thebes, Sakkara, and other places such fragments are abundant, on which are notes, memoranda, and other writings in black. So common are these that they clearly indicate a universal custom of substituting pieces of pottery for papyrus in ordinary use. The same custom prevailed in Greece.

The Egyptian enamelled pottery has been called porcelain by many archæologists; but although the meaning of this word was unsettled two centuries ago, it is now applied exclusively to translucent pottery, and its use in reference to Egyptian enamelled pottery is not correct. We have seen that the Egyptians understood the use of enamel on vari-

ous substances. They also made glass, of great beauty and in various colors. They made small objects of white and colored enamel paste, translucent, for inlaying in wood and other substances. These objects were sometimes of great beauty, and some of them present very much the appearance of that soft-paste porcelain which in many modern factories approaches closely to opaque glass. Although this product is not strictly porcelain, unless it should be found that white clay enters into its composition, it is so close an approximation to it that it demands special classification among the early arts of the human race which passed from Egypt to other countries. A small profile figure of Isis in our collection is made of this pure white translucent paste, and was probably once inlaid in wood.



15. Egyptian Representations of Plants from the Monuments.

The Egyptian styles of ornamentation are so marked that their presence is at once detected wherever they are found in Phœnician, Greek, or other decoration. The illustration given of methods of representing flowers may serve as an example (III. 15). Here are the designs, found in varying forms on Phœnician and Greek vases; and here, perhaps, is the origin of the "lily work" wherewith Phœnician artists adorned the pillars of the Temple of Solomon.

II.—ASSYRIA AND BABYLONIA.

It will be an assistance to the student of ceramic art who seeks in it a guide and aid in the study of ethnology, if he will dismiss from his mind the vagaries of some philosophers, and start with that simple understanding of the origin of the human race which the accounts of the Hebrew Moses furnish him. Even if he were to abandon all idea of the inspired, and therefore authoritative, character of those writings, it remains true that the study of art up to the present day has in all respects confirmed their historic verity. No student of ancient art can find cause to doubt any statement of the great Hebrew historian of the early ages. Every discovery made by modern explorers among the ruins of old art which has any bearing on the books of Moses, or the later Old Testament histories, agrees with and confirms them. No fact has been found contradicting any one of their statements.

The ceramic student will in the end accept the Hebrew history as correct, since he will find it confirmed by all discoveries in this old art. Starting with the fact that a small family, saved from the destruction of a race, resided in Western Asia about five thousand years ago, the study of ancient art shows that the families of men spread eastward and northward, southward and westward, from this central point. Asia, Africa, and Europe were peopled slowly from the descendants of a small family. Whence they derived some of their arts is not mere conjecture. The Hebrew historian wrote in an age of books. His authorities were abundant in the libraries of Egypt. It is evident, from the monuments and the papyri, that long before his time historians, poets, philosophers, authors in great number, had educated Egypt. The words which imply writing and the materials for writing are found in the earliest known forms of language, and are the same in various languages proceeding from the first Dispersion. That among the early works there were records brought down through the Deluge is not a violent theory. Moses mentions two antediluvians as the originators of two important arts, and it is hardly possible that those arts had been lost, and reinvented after the Deluge; for in that case he would probably have named the new inventor, instead of the old.

The scattering family of man carried with them in various directions more or less of the useful arts, and some of the ornamental. It was not until the emigrants had settled in groups, and acquired peculiar character-

istics as tribes or nations, that styles of art became marked by the natural objects which surrounded them, and by the religious emblems which they adopted.

These points are important to be kept in mind; for at a late period, compared with the date of the Dispersion, colonization sometimes went eastward from Europe into Asia. Thus the coasts of Asia Minor were overcome and settled by Hellenic colonies, and Cyprus, already peopled from the East, received Argive colonists. But the Hellenic tribes were descendants of the same family with the Phenicians among whom they settled, or whose cities they took. In art, as in language, there are sometimes roots which are recognizable, though the word or the object be greatly changed from its origin; and the student will often find the explanation of the presence of these art roots in ancient Greek, Phenician, and even in Chinese and Indian art, in the common origin of all the races.

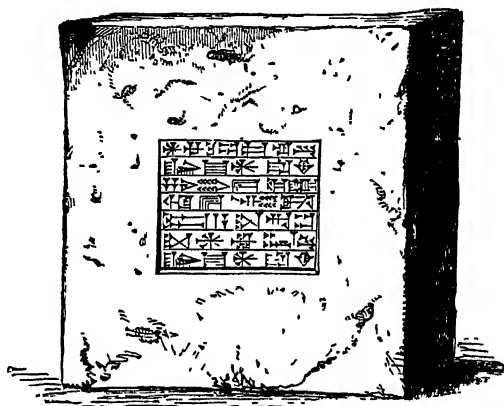
The wonderful preservation of ancient Egypt, her monuments, and her dead with their household goods around them, has made the modern world well acquainted with Egyptian art from the earliest periods. Possibly, were we as well acquainted with the early art of Mesopotamia, we should find it very much in advance of that of all other contemporary tribes. But, so far as is now known, the arts made no advance here for many centuries. The Babylon and Nineveh known to modern explorers are not cities of the earliest ages. Their history extends only to the fifteenth century before Christ, and even at that period their existence is known only by finding their names on Egyptian monuments. What civilization and arts preceded them in the heart of Asia is unknown, except from mounds of brick, stamped with the names of kings of whose kingdoms no information remains, but which were probably not much greater than those of the kings associated with Abraham after he came out of Chaldea.

What were the peculiar symbols of the religions of the people in Mesopotamia and Assyria in the earlier times no means of knowing exist. If it were safe to form a final opinion from present imperfect knowledge, it would appear that none of the families of men except the Egyptian had a sufficiently long residence in peace and prosperity to acquire characteristic arts until more than a thousand years after the Dispersion. Egyptian art first acquired age, and with age power; for, explain it how we may, art has always gained force and influence by age. And thus, when the various tribes who had remained in the Euphrates valley or located themselves in Phenicia and in the eastern parts of Europe, who had led wandering lives, or had simply existed in barbaric contentment

and simplicity, began to build cities, form governments, and become fitted for the introduction of ornamental in addition to useful arts, the Egyptian influences were everywhere omnipotent. The Phenician were far in advance of the Hellenic tribes, for the latter had, down to 700 B.C., little or no knowledge of ornamental art. Whether the Babylonians and Assyrians were in advance of, or learners from the Phenicians is doubtful. Less is known at present of their early arts than of the Phenician; and in the ceramic art, what little is known of the Mesopotamian families shows that, while originally possessed of the art for purposes of utility, the knowledge of using it for beauty was derived from Egypt. It is among the possible results of recent discoveries and of explorations yet to be made, that the order of progression and transmission of the fine arts will appear to have been from Egypt to the Phenicians, and from the Phenicians to Assyria and Babylonia as well as to Greece.

The earliest record of pottery is found in the first book of Moses (Gen. xi., 2, 3), where it is said of the wandering families of men, "as they journeyed from the east, that they found a plain in the land of Shinar; and they dwelt there. And they said one to another, Go to, let us make brick, and burn them thoroughly. And they had brick for stone, and slime had they for mortar." Men who knew how to make brick, of course made pottery in other forms. The art of brick-making was pursued in Babylonia and Assyria to an extent elsewhere unparalleled. Remains of vast brick walls of cities and edifices abound. The brick were sometimes only sun-dried, sometimes baked. Both kinds are found entering into the structure of the same building, and vast mounds, hills of ruins in brick, mark the site of ancient towns, palaces, and fortresses on the plain of Shinar and in all parts of Mesopotamia. These bricks, as in Egypt, frequently bear the name of the king in whose reign they were made. The oldest bricks hitherto discovered are those found by Mr. Loftus at Warka (by some supposed to be Ur of the Chaldees). These have the name of a King Uruk, with a dedication to the moon, and are supposed to date about 2200 B.C. Bricks of some of the immediate successors of Uruk were also found. These are exceptional in antiquity. We have no series of dated works in pottery from this time forward, although the vast ruins waiting to be explored will perhaps yield to future search an historical succession of ceramic objects. Mr. Loftus found bricks with the name of a king who reigned about 1500 B.C., and after this there is a gap in the succession of more than five hundred years. After 880 B.C. numerous edifices of brick furnish examples with the names of kings, as of Assurnazirpal, 880 B.C.; Shalmaneser II., 850 B.C.;

Sargon, 709 B.C. Bricks are found of Sennacherib, Nebuchadnezzar, and other monarchs named in the sacred books. Perhaps in nothing is the enduring character of pottery better illustrated than in the fact that on the bricks of 2200 B.C. are visible the marks of the feet of birds and



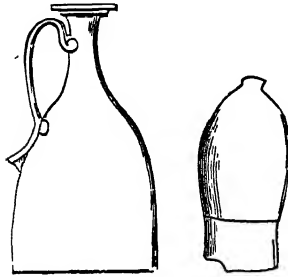
16. Babylonian Baked Brick, with Name of Nebuchadnezzar ; 12 inches square.

weasels, which ran over them when they were lying in the sunshine, to dry before baking.

In later times the Assyrians and Babylonians learned from Egypt the art of enamelling pottery, and used stanniferous enamel. Then they covered the edges of brick with brilliant color, and made walls which shone with great splendor. They did not equal the Egyptians in the finish of their work, but employed it on a much grander scale. Patterns ran along the walls from brick to brick, in white, blue, black, red, yellow. Figures of men were executed, the complete figure requiring several bricks. Flowers, chain patterns, and animals were painted in the enamels, as well as inscriptions. The remains of the temple of Belus at the Birs Nimroud, examined by Sir H. Rawlinson, indicated that it was a terraced pyramid, each terrace made of enamelled brick of a different color. The highest terrace, supposed to have been dedicated to the moon, was greenish gray; the next blue, dedicated to Mercury, and this is supposed to have been enamelled and baked in position after it was built. The next terrace was yellow, dedicated to the sun; the next pink, to Mars; the next red, to Jupiter; the lowest black, to Saturn. Under this the foundation was unbaked brick. All the bricks found in this ruin are of the time of Nebuchadnezzar. Imagination can hardly exaggerate the splendor of the enamelled walls and palaces of Babylon and Nineveh. They have their successors in the exquisite works of the Saracens, who alone

of modern nations have covered the exteriors of buildings with enamelled faience.

Few vases are known of Babylonian or Assyrian work. Such as have been found resemble the Egyptian, but have no special characteristics as works of art. A few specimens, discovered by Mr. Layard and Mr. Loftus, give us no idea of the style of decorating pottery.



17. Earthen Jars found in Babylonian Ruins.

Both the Babylonians and the Assyrians used pottery for the purposes to which we apply paper. They impressed on sheets or plaques of prepared clay (Ills. 18, 19) writings which they desired to make permanent, and baked them for preservation. No equally sure method of preserving records is known. The discovery by Mr. Layard

of the library of one of the palaces of Nineveh has furnished to modern scholars a great quantity of the literature of ancient Assyria. The cuneiform legends are impressed either with a special instrument or with the corner of a metal rule. The ordinary business of Nineveh was carried on by the aid of this art. Contracts for the sale of property, transfers of lands, slaves, and other possessions, remain to this day in sharp characters on the small pottery tablets, stamped with the seals of the contracting parties. Engraved cylinders and signets in stone were used for impressions on clay. Books were thus written and preserved. It is estimated that twenty thousand pieces of ancient Assyrian tablets and books have been found. The lamented George Smith has given from such pottery pages (Ill. 20) the Chaldaic accounts of the Genesis and of the Deluge, and future examination is destined



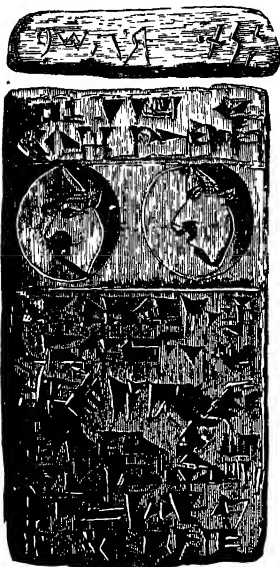
18. Inscribed Tablet of Pottery.

to bring out from the same sources much of the history of Assyria and Babylonia. Sometimes these tablets are double, one containing within itself a duplicate record. They are found in Babylonia as well as Assyria. A series found at Warka extends through the reigns of Nabopolassar (600 B.C.), Nebuchadnezzar, Nabonidus, Cyrus, Cambyses, Darius, Artaxerxes, and the Seleucid monarchs, down to the second century before the Christian era.

Cylinders and hexagonal prisms in pottery were covered with inscrip-

tions minutely executed. These were sometimes deposited under the corners of the platforms of public buildings.

Some small pottery tablets with relief figures have been found, which Mr. Birch suggests may have been sketches by artists preparatory to important works.



19. Inscribed Tablet of Pottery.

Among the most remarkable objects in pottery are coffins, found by Mr. Layard at Niffer, and in vast numbers at Warka by Mr. Loftus, who says that this spot appears to have been a sacred burial-place for a period of probably twenty-five hundred years. He found the burial-mounds to be literally masses of the dead to the depth of thirty feet; and he estimated the depth at thirty feet more. He does not state that he found here the large urn-shaped vase; but this was a common Babylonian form of coffin, lined with bitumen and covered, sometimes with brick, sometimes with a pottery lid. Sir Henry Rawlinson found in such jars skeletons, and skulls which could not possibly have gone in through the small orifice. He therefore infers a custom of making first the lower portion, which received the body,

and placing or moulding over it the upper portion, then baking the jar with the enclosed remains. Mr. Loftus found numerous specimens in a form resembling "an oval dish-cover, the sides sloping outward towards the base." These were from four to seven feet long, two feet wide, one to three feet deep. These are supposed to be Babylonian. But the most interesting coffins were slipper-shaped; the oval opening closed with a lid. These were ornamented with embossed figures of warriors, in panels, the whole visible surface covered with a rich green enamel on the exterior, and blue within the aperture. The green, Mr. Loftus thinks, was changed by time from the original blue. The material is yellow clay mixed with straw. The interior surface shows marks of the reed matting on which it was formed. These coffins probably date from the Sassanian period, and are among the latest specimens of glazed pottery of ancient art continued down towards modern Saracenic work.

With the remains of the dead at Warka were found various pottery objects—cups, small vases, and images, but none which appear to be definitely assignable to an early date. Many images in pottery have been found in Babylonia and Assyria, which are of the same general character

with many found in Cyprus (Ill. 23), and closely resemble examples in the Cesnola collection.

A remarkable class, found in considerable quantity by Mr. Layard in the ruins of ancient Babylonia, consists of unglazed pottery bowls, on which are inscriptions written in black. The illustrations (24, 25) will show the form of these, with a fac-simile of one of the inscriptions. Mr.



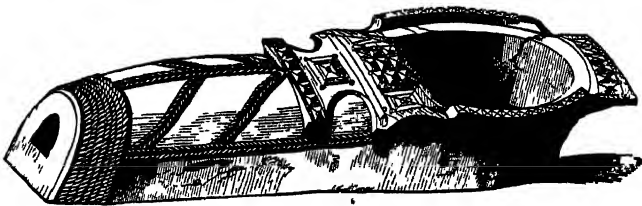
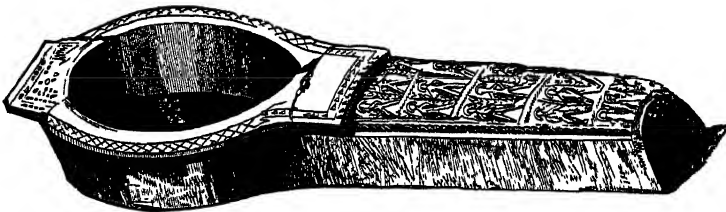
20 One of the Tablets of the Deluge.

Thomas Ellis (of the British Museum) examined, deciphered, and translated several of the inscriptions, which proved to be in the ancient Chaldean language, written in characters wholly unknown, and never before seen in Europe. The subjects of the inscriptions are amulets, or charms against evil spirits, diseases, and misfortune. The characters answer to the description given of the most ancient Hebrew letters in the Baby-



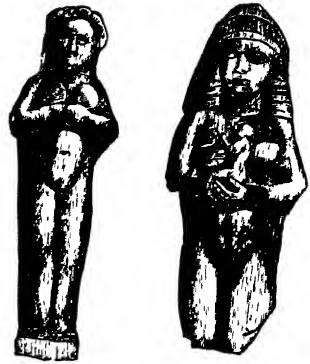
21 Terra-cotta Tablet from Babylon.

lonian Talmud, which contains an account of the nature and origin of the letters used by the Jews. The words *Hallelujah* and *Selah* occur in nearly all. Pure Hebrew sentences are mixed with Chaldaic. Mr. Ellis regards it as quite certain that the inscriptions were written by Jews; and



22. Glazed Coffins from Warka.

there is no reason to doubt that they were the work of descendants of the "people of the captivity." The Hebrew population of Babylon was large in the early centuries of our era. Benjamin of Tudela, who travelled in the twelfth century for the purpose of reporting the condition of the Hebrews in various parts of the East, found large numbers of them, and in Baghdad ten Hebrew colleges. He gives a list of presidents of these colleges, who were called *Batlamim*, "the Idle," because their sole occupation consisted in the discharge of public business—a name which would perhaps better apply to some modern holders of office. In Baghdad at that time was Rabbi Daniel Ben Chisdai, descended from King David, and bearing the title among the Jews of "Lord Prince of the Captivity." The Mohammedans recognized him by the title "Saidna Ben Daoud"—

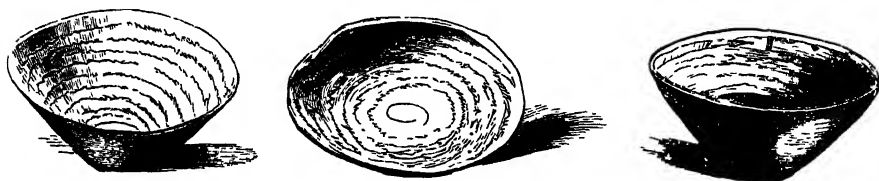


23. Figures of Assyrian Venus.



24. Inscribed Bowl from Babylon. Diameter 6 inches, depth 8 inches.

"Honorable Son of David." This and other evidence indicate an interesting and unwritten chapter of Hebrew history, which is important here only because these ceramic relics are among the few links in the art which possibly connect the Babylonian and the modern Persian work. Mr. Layard is of opinion that the specimen illustrated with its inscription (Ill. 24) is the most ancient found, and "might be referred to the second or third



25 Inscribed Bowls from Babylon.

century before Christ, but may be of a later period," while others are of a more recent date, possibly as late as the fifth century of our era. Others are of opinion that these bowls may be much more modern; and it has been said that similar wares are made in some parts of the East at the present time. The authority for this statement is not given.

No distinction has been attempted, in this sketch, between the pottery of Babylonia and that of Assyria, since they are in all respects similar.

III.—PHENICIA.

Among that portion of the human race who after the Dispersion wandered to the shores of the Mediterranean, and gradually spread themselves over its islands and along its coasts, a unity of language, religion, and art bound together a family whom we are accustomed to call Phenician, but of whom we have hitherto known little. Their art period extends from the fifth century before Christ back into unknown centuries. That they had artists and art was evident from the application made to them by Solomon, and the valuable aid rendered by them to that monarch. Their cities on the Philistine and Syrian coasts are historical; but ruin and time have sadly erased the records of their work. Suddenly in our own day their art has come to light, in pottery, bronze, precious metals, gems, and sculpture, in surprising brilliancy. Cyprus was Phenician from an early date, and the explorations of General L. P. Di Cesnola in Cyprus have not only revealed an immense amount of material for Phenician studies, but have also cast a flood of light on the origin of Greek art. The Cesnola

collection, which now forms part of the treasures of the Metropolitan Museum of Art in New York, includes several thousand vases, a large col-

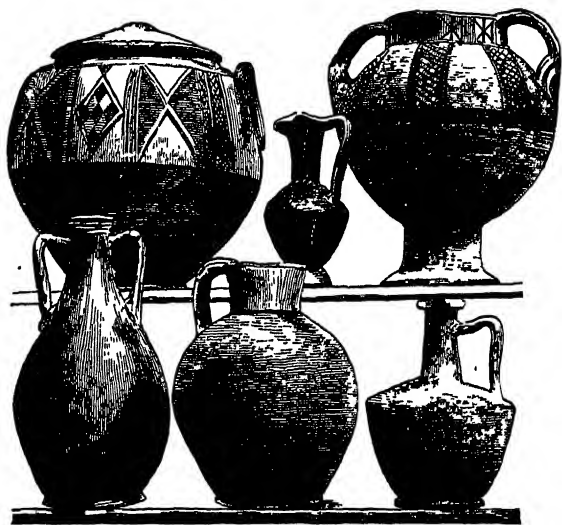


26. Phœnician Vase. Buff pottery decorated in black. (Cesnola Coll)

lection of statuary, bronzes, and exquisite gold and silver, the work of successive centuries, and of very many generations of men in one locality. The latest specimens are of Roman times, in the fifth and sixth centuries after Christ. The earliest specimens are of unknown date, but doubtless many are of a time preceding the Egyptian conquest of Cyprus, about 1440 B.C. There is here a history of local art extending through a period of two thousand years, illustrated by a vast number of objects. These were found chiefly in tombs.

A very interesting portion of the collection, of the highest archaeological importance, consists of articles of the most artistic fabric and taste in gold, engraved gems, silver, bronze, alabaster, and pottery, found in the treasure-vaults of a temple at Kurium, where they had lain intact

since the destruction of that city and its temples. The character of these articles sufficiently indicates that they were an accumulation of long time, probably some centuries, during which they had, from age to age, been added to the temple treasury as gifts of devotees. These, therefore, alone afford a subject of study of great interest, since they illustrate an art history which comes to an abrupt conclusion at the date of the destruction of Kurium. That date fixed would furnish a trustworthy starting-point in the study of both Greek and Phenician art; for among the illustrations are some which belong to the early Greek school, others which show the union of Greek and Phenician influence, many which indicate Egyptian influence, and many purely Phenician. Unfortunately, this is not fixed with accuracy. It was probably about the middle of the sixth century before Christ. It cannot have been far from that time.



27. Phenician Vases. (Cesnola Coll.)

Historians furnish very little knowledge of Greek art history in this century which is trustworthy, and occasional discoveries made hitherto have afforded little more than material for theories. But there is here very good evidence that the late history of Phenician art is the early history of Greek art in Cyprus; that the former is the mother of the latter. The very regular succession, indicated not only in the Kurium treasure, but in the thousands of specimens in the entire Cesnola collection, assists in the explanation and correct classification of many exceptional specimens of early Greek art, and art preceding the pure Greek,

which have been discovered elsewhere, and heretofore arranged with much doubt.

The limits of this volume forbid any attempt at a thorough account of the Phœnician potteries. Nothing more can be accomplished than a brief description of the varieties, which will be useful as an aid to their examination and study.

The potteries of Cyprus show a succession of art history which may be divided into styles, which are not always, however, of distinct periods, for the earlier styles prevailed more or less in later periods. These styles are:

1. PHœNICIAN; 2. EGYPTO-PHœNICIAN; 3. GRÆCO-PHœNICIAN; 4. GREEK; 5. ROMAN.

The difficulty of assigning specimens to the earlier periods of time arises from the danger of mistaking rude work of poor potters in late times for archaic attempts at art. This difficulty attends the examination of all ancient pottery. There is a very close resemblance, especially in attempts at the human figure, between the first work of barbarians and the mud images made by modern children. But there is no hesitation in classing some decorations as purely Phœnician, especially with the aiding facts that these were found in Phœnician tombs, and, in one instance at least, accompanied with a Phœnician legend. Checks, diamonds, squares of alternating color, incised decorations in patterns, circles rudely drawn, circles sharply drawn, singly or in concentric groups, and accompanied by lines or bands around the objects—these more or less elaborately arranged on the vases—are all characteristic Phœnician decorations. Checks, zigzags, and diamonds are the first ornaments of barbarians. But the Phœnicians seem to have been the originators of systematic decoration. No earlier instances are known of what may be called styles. Mere checks or diamonds, common to savage tribes, are here arranged in columns, bands, compartments, in parallel groups, dividing the surface of the pottery into equal portions; and these patterns occur on many objects, thus forming styles. They are on objects of various date, and probably more or less of these antedate the Egyptian conquest.

That conquest produced a marked effect, which characterizes EGYPTO-PHœNICIAN art. Egyptian styles, symbols, colors, and decorations abound, executed by Phœnicians in Phœnician manner, unlike that of Egyptian workmen, and intermingled with Phœnician symbols and characteristics.



28. Phœnician Vase
(Cesnola Coll.)

Birds, fish, and lotus-flowers are painted in deep red and black, at first singly or scattered on the sides of vases, then arranged in groups, zones, or bands. Perhaps this last arrangement does not occur until the beginning of the next period. The human figure is very rare. The Egypto-Phenician style was used only by the Phenicians; it was not known in Egypt. When the other branch of the human race, who had crossed the sea from the Ionian coast to Greece, and who were practically barbarians until educated by contact with the Phenicians, began to colonize Cyprus, the new element introduced a new spirit into Phenician art; and here commences GRÆCO-PHENICIAN art. The pure Phenician had remained synchronous with the Egypto-Phenician through the previous period, and still survived. The Greek mind at first contributed nothing original to these arts, but seized them, adapted them to Greek tastes as those tastes developed and improved, introduced the union of pictorial illustration of story and history with the beauty of form which was Phenician, and so, gradually, brought into existence the splendor of Greek ceramic art. The Phenicians and Greeks worked contemporaneously, and it was not till during or after the sixth century before Christ that Phenician art was wholly merged in the Greek. But the Phenicians had submitted to the superior power of the Grecian intellect, accepted new ideas, modified their styles in painting and sculpture, and thus the latest work of the Phenicians was probably in the style called Græco-Phenician, although the Egypto-Phenician still survived, and the Greeks founded on it the style hereafter described, sometimes called Doric.



29. Venus with Attendants.
(Cesnola Coll.)

The vast collection of General Cesnola must be studied with care before it will be possible to distribute the specimens in their respective periods of time. We must be content at first to classify them by the styles of pottery or of decoration, remembering that in some styles the specimens are of various periods of time, and that different styles are of contemporary date. Nor are the styles of decoration always peculiar to the class of pottery, although certain styles of decoration prevail on certain classes.

1. Cream-colored unglazed pottery, coarse paste, rough surface, without decoration in color. This class includes objects made at different periods, very ancient, and contemporary with the Greek. Cups, bowls, vases, pateræ, lamps, and other useful articles

abound. Images of deities, of men, bulls, birds, horses, fish, mostly very rude, are also abundant. Many vases are in the shapes of animals, especially of deer, bulls, fish, and birds resembling ducks. Some of these forms may imply Egyptian ideas. Images of the Venus of the Phenicians are found in a variety of forms, from mere slabs of clay, with slight indications of features and form in relief, to good work showing a great degree of taste and skill.

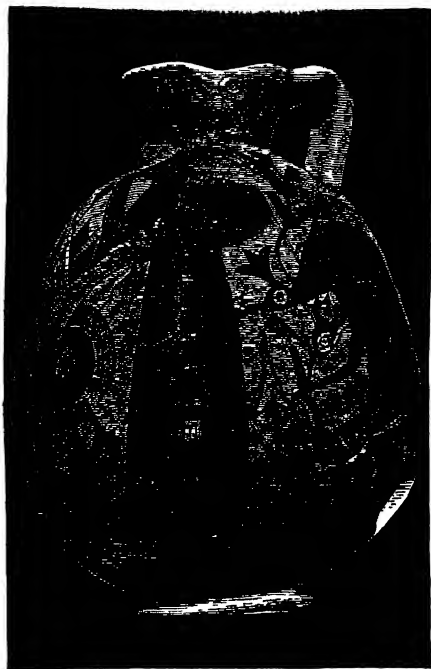
2. The same unglazed cream-white pottery decorated in black only. The objects in this class are generally archaic in appearance, and some of them are among the first specimens of decoration. There is no pretence to artistic style. The black lines are rudely drawn, in checks, diamond patterns, parallel masses, and cross hatchings, sometimes in bands, perpendicular or around the piece. Figures of animals, and vases in animal shapes, are rudely daubed with dashes of black. These primitive decorations fall into regularity of arrangement, making characteristic styles, such as appear on vases in Ill. 27.



30. Bottle in Bird Form. (Class 2, Cesnola Coll.)

3. Brick-red unglazed pottery without color decoration. Objects in this primitive style of pottery are of various forms, including many images of Venus which are exceedingly early, and a few specimens which are important in size and appearance. A large vase, bottle-shaped, with small neck, two feet high, has raised ornamentation about the neck descending on the bulb, in ribbons or twists of clay. Immense caldron-shaped vessels (pithoi?) have each two spouts side by side. In general, the red pottery was covered with white clay before baking, and this is included in the class following.

4. Unglazed pottery, cream-white, decorated in colors. In this class is included pottery of buff paste, and also of brick-red paste covered with a surface of cream-colored clay. The colors used are chiefly red and black, occasionally brown. Of this class are specimens from the times before the Egyptian conquest down to the Greek period, in many styles of decoration. This is apparently the predecessor of the oldest Greek pottery decorated in the style heretofore known as Doric or Egyptian. The earliest decorations are like those on Class 2, and are probably contemporary with some of them, the only difference being in the introduction of red lines with the black. This peculiar red color is characteristic of Egyptian work, and may have been derived from Egypt



31. Egypto-Phenician Wine-jug. (Cesnola Coll.)



32. Egypto-Phenician Wine-jug. (Cesnola Coll.)

before the Conquest. The progress of art was exceedingly slow in Cyprus, if, indeed, there was any progress for a thousand years. The Egyptian influence introduced the lotus-flower and certain large water-birds, which are the most striking characteristics of the decoration after the Conquest. On one ancient vase a rude figure has a remote resemblance to a man; on another, a buff-colored vase with a few black lines on its neck, is a full-length figure of a negro boy, probably a slave, rudely daubed in black. Deer and other animals are rare, but appear on a few vases; and on one the full-length human figure, clothed in colored Phenician garments, for the first time in history makes its appearance on pottery. The illustrations (31, 32) show the two sides of a wine-jug nine inches high, on which two figures appear, among Egyptian symbols, their heads turned awkwardly away so as to give the profiles. The artist was unable to paint a front face, and forced the position. The faces are drawn in black, the dresses red; the sashes, which fall in front, are black, the simple pattern being left open, showing the cream-clay color of the vase. This vase is important as being one of the earliest known specimens of ceramic art on which the human form is represented

in colors. Its date may approximate to 1000 B.C., but this is mere conjecture.

A vase somewhat thinner than others of this class, and perhaps belonging to a place midway between this and Class 5, is important because having Phenician letters on the surface baked with the vase. Its form is graceful, urn-shaped, the two handles on each side springing like slender horns, and curving over and downward in opposite directions. The horns spring from one oblong root, and on this in black are eyes and mouth, indicating a head, perhaps of a deer or a bull. The decoration is in checker and diamond patterns of black and brown, the checks outlined in black and filled in with brown. Red bands run around the vase and its foot. Another somewhat similar vase has the body fluted perpendicularly, a frequent style of ornament, which may have been originally derived from, and adopted in imitation of, shells which abound on the Mediterranean. This class includes articles of late period showing Greek characteristics.



33. Symbols on Phenician Pottery.

Among the most frequent decorations on this class of vases are broad concentric circles, of alternate red and black, sometimes around a central figure in the shape of a Greek cross. On these, as on other classes, the peculiar Asiatic sign, known as the *Swastika*, is frequent. This (the first of the three symbols in Ill. 33) has also been called "the Sign of Life." Its signification is wholly unknown, but, like the Meander pattern, it is a direct derivative from a decoration in checks. On one vase this sign is placed in the open mouth of a fish, an arrow pointing towards it, while a stork pierces the fish with his bill. Another common sign or symbol used on these vases is a cross with dots between the arms, perhaps another form of the sign of life. Another very common decoration is a row, longer or shorter, of lines like arrow-heads, one within another.



34 Phenician Bottle. (Cesnola Coll.)

5. Cream-colored unglazed pottery, nearly white, very compact paste, thin ware, dark-colored body, covered with a fine white clay, which is polished down to a hard surface often approximating to the appearance of enamel. The decoration is chiefly in archaic styles, bands of checker and diamond patterns rudely drawn, in a brownish black, sometimes a deep black. Bowls large and small, water and wine jugs, cups and pateræ,

are numerous; other forms rare. The bowls, usually shaped like sections of the gourd, are apparently imitations of the primitive gourd utensils, and almost or quite as thin, with one or with two projecting handles.

Some large vases of this ware are highly interesting. One, a krater of fine form, is decorated with horses and chariots, following one another around the vase, separated by broad waving bands which may represent streams of water. The details of this decoration, though unartistic, are minute and full of instruction as to Phenician vehicles, harness, etc., and the vase occupies an early position among Græco-Phenician painted subjects. Many of the objects, especially thin bowls, are fire-cracked and warped out of shape in baking. This ware was possibly among the Phenicians an object of luxury, occupying a position not unlike that which porcelain formerly held in Europe and America in contrast with pottery.

6. Lustrous wares, black or red, decorated with incised lines filled in with white clay. This is a very remarkable class, of which there are



33. Græco-Phenician Vase. (Cesnola Coll.)

numerous specimens—great bowls over a foot in diameter, vases seldom large, small bowls, and cups. The lustre is brighter than the later Greek, and shines like a true glaze. It is, however, very thin, yields to a hard point, has an oily appearance, polishes under the hand, and seems to have been a varnish which penetrated the clay, and caused the surface to bake much harder than the interior. The objects are all thick, coarse, and heavy. The paste is of fine clay, dark slate-colored, with occasional small lumps of brick-red intermingled. The outer

part to the depth of a sixteenth of an inch can be split off with the lustrous surface, as if put on with it, but the paste is uniform throughout. The red color is good, but uneven. The black is intense and bright. The decorations are incised through the lustre, after the ware was baked, in parallel lines, running in parallel zigzags, or in circles or rude patterns. Concentric circles are sometimes arranged around the object, united by straight lines. These circles are untrue, rudely chipped in the lustre, by the eye. The specimens bear remarkable resemblance to the pottery of many uncivilized makers. The Guatemalans now make, and the Peruvians and others have made, similar wares. But for the lustrous surface they might be regarded as specimens of the earliest art; and such they

may be, the lustre being produced by the use of some sort of varnish before baking, with a repetition of it and polish after baking. The modern Egyptians produce red and black pottery of the same appearance by polishing. The substance which fills the lines is a pure white. The numerous specimens of this peculiar ware were found in one locality only, in tombs at Alambra, near Dali, and they may be distinguished as Alambra pottery, since they have not been found elsewhere in the East.



36. Egypto-Phenician Vase.

7. Red lustrous ware decorated in black. This class approaches the Greek style of pottery, and seems to have been the ware afterward chosen by the Greeks for their best work. The class, however, includes articles of greatly earlier periods than any Greek work. The decorations are almost exclusively in circles, and the style must be regarded as Phenician. Sometimes a few circles appear arranged on the sides of the objects; sometimes many concentric circles, and many groups of concentric circles, always sharply drawn. The forms are various—chiefly bowls, vases, bottles, and cups. The surface is of a clear uniform red, artificially produced; the lustre that thin dead varnish-like lustre of the later Greek work.

To this class belong several fine vases, varying from twelve to fifteen

inches in height, one of which is illustrated (Ill. 37), a peculiarity being the ornamental spout, a ewer held by a figure which on all the specimens but one is Phenician. On that one the figure is Greek in feature and drapery. On some of these the decoration is in bands of black, while on others leaves, etc., in white are added. The Greek figure on one, and the Phenician figures on all the others, fix the period of these specimens, which are to be classed as Græco-Phenician of the time when Greek character and taste had modified Phenician decoration. On one vase, which from its general character is placed in this class, is a figure of the sacred cow of Hathor painted in a clear yellow.



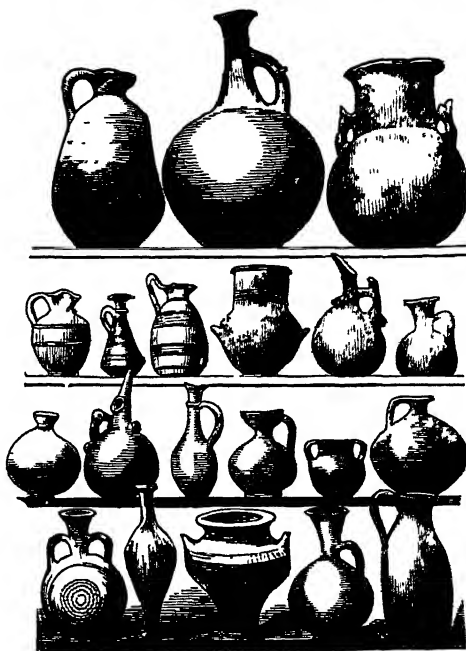
37. Græco-Phenician Vase, in red lustrous ware.
(Cesnola Coll.)

Imitations of this pottery are also found. These are of heavier pottery, and the red color, as well as the black circles, has been painted after the baking. In a few cases a dull vermilion has been used to heighten the color of an object after baking. It may be conjectured that such specimens are late attempts to imitate old wares; or that the finer quality of this ware was an article of luxury in Cyprus, made by the best potters only, and that the poorer workmen made imitations. There is much difference in the quality and work on the lustred specimens, some rising in paste and fabric to full equality with the Greek pottery of the best times.

8. Brick-red unglazed coarse pottery, with rude decoration in white lime or clay, which is easily scraped off. The decorations are mere daubs of white, but on one vase which has a spout two eyes are indicated on each side of it. This ware is found elsewhere, and has been regarded by some as the most archaic Greek pottery. We are not prepared to regard it as of any definite period; rather considering it a lower class of work

of potters in all times from the earliest down to late Roman. There is nothing in the ware, either in paste, form, or decoration, which aids in assigning dates.

9. Cream-colored unglazed pottery decorated in red only. These objects are interesting as specimens of different periods. Some appear to be covered with a thin lustre. Specimens are decorated in checks and crossing lines; others in irregular perpendicular lines parallel to each other; others in arabesque patterns, which become in later specimens more regular, and include carefully executed meander patterns, as well as deer and other animals. Bottle-shaped vases of rough pottery have no color except around the neck, or on the rim at the top, which is colored to a soft vermillion. A few specimens are tinted red over the whole surface, and have rings of deeper red. The class is specially important as showing decorations with animals, etc., which are among the illustrations of the advance from symbolic decoration to the subject painting of the Greeks. Such specimens are of late Phœnician and early Greek work. Doubtless potters of both nations produced more or less of these wares. The pottery varies, some being coarse and thick, others well tooled, with polished surface.



38. Phœnician Vases. (Cesnola Coll.)

10. Cream-white pottery, polished surface, decorated in a rich brown. These are vases of beautiful shape, small bottles for oil and other objects. The brown is rich, shading into yellow. The decoration is usually in parallel bands and lines around the object.

11. Black wares with fluted sides. These are remarkable for beauty of shape, mostly in wine and water pitchers. One noble vase is oviform, nearly two feet in height.

12. Red lustrous wares without decoration. These are probably of Greek and Roman times.

13. Greek painted vases, not Phenician. Among the Kurium treasures are several fine specimens of Greek work, figures in black on red.

14. Objects in terra-cotta, or clay slightly baked. The unglazed potteries of Cyprus are of such soft material in many cases, and were so slightly baked that it is difficult to separate them from the objects properly called terra-cotta.



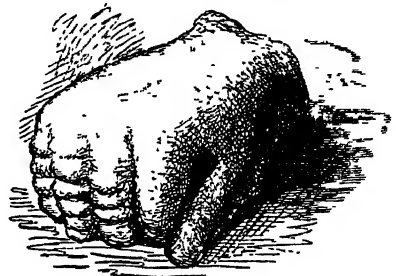
39. Colossal Phenician Head. (Cesnola Coll.)

We have not classified here the larger sculptures in pottery, which are of various periods. A colossal Phenician head is of the ante-Greek period. Other life-size heads are of Greek times. Neither have hundreds of lamps of the Roman period been included.

There are many exceptional specimens, some of the highest importance. A colossal vase, four feet high, has a cover surmounted by a small vase. The ground is cream-color. The decoration in brown is in narrow bands, of horses, goats, antelopes, and animals possibly intended for deer, but certainly resembling the giraffe. The immense vase has four handles, and is covered with innumerable pictures of animals, and with decorations including checks, diamonds, squares, and other patterns in archaic and later styles of ornamentation, including the Meander; in short, nearly every form of decoration known on Phenician pottery. It is colossal in size and appearance, Phenician in workmanship, and a noble specimen of archaic ceramic art. It probably belongs to the Græco-Phenician period.

The remarkable fact must be noted that the vast collection gives no evidence that potters worked by patterns or rule. There is no uniformity of size to indicate an established system of measures. Duplicates in decoration are almost unknown. The Phenician potter or artist appears to have followed his fancy in the size and decoration of each piece that passed through his hands, and the collection affords an invaluable mass of material for studying the rise and growth of original forms of decoration.

Many of the forms of Phenician pottery are ingenious. Several small vases standing on a hollow ring form one vase, the liquid rising to the same level in each. Puzzle vases of various forms, and vases which fill from small apertures in the bottom, are frequent. In the tombs of soldiers, General Cesnola found numerous pottery images of men on horse-back. There are groups of men engaged in various employments, kneading bread, bathing, etc. A funeral procession in pottery includes donkeys carrying baskets, a horseman carrying vases, a chariot carrying musicians, other chariots with the family, and, closing the procession, a platform on which is a body in the form of an Egyptian mummy, the face covered with a mask of the sacred cow. This is thoroughly Egypto-Phenician. Children's toys are of not uncommon occurrence. A horse might be thought to refer to the story of Troy, if it were not more probable that it antedates that history. A man's hand, the fingers loaded with rings (Ill. 40), shows the old style of wearing them. Among the objects found by General Di Cesnola at Kurium were several pateræ, or plates, each having two holes pierced in the rim for a string by which to hang it, and bowls with similar perforations. This is a common characteristic of modern pottery in Italy and in Holland.



40. Pottery hand. (Cesnola Coll.)

It will be borne in mind that although the Egyptians made enamelled pottery, and specimens of their enamelled ware are found in Cypriote tombs, the Phenicians do not seem to have made it, and it rarely appears in the ceramic history of ancient Europe. The enamelled walls of Babylon and Assyria were built long after the Phenicians had been instructed by their Egyptian conquerors. The art went eastward in Asia, and we meet it centuries later in China. It remained in the western part of Asia; or, having been lost, was recovered there from the East and transmitted to modern Europe.

The Cypriote collection suggests possible conclusions to which careful study may lead. These are, substantially, that what has hitherto been known as archaic Greek art must be designated in Cyprus as late Phenician art; that Greek art in that island had no existence prior to the eighth century before Christ, but was born of Phenician parentage at about that date; that the Phenicians in Cyprus (and probably in other localities yet to be explored) were, next to Egypt, the most advanced race in the arts,

from 1500 to 600 B.C. ; and that Phœnician art, receiving the direct influence of Egypt, became the parent of the arts, not only in Greece, but in Italy, and possibly in Assyria and Babylonia.

IV.—HOLY LAND.

That the Hebrews made and used pottery is well attested by their historical writers, and by the frequent allusions to the potter and his work in Sacred Scripture. But no artistic work seems to have been produced, and no specimens or fragments have been found, which furnish any idea of styles of decoration or favorite forms. Solomon (Prov. xxvi., 23) likens "burning lips and a wicked heart" to a "potsherd covered with silver dross," which may allude to a broken crucible, or possibly to pottery covered with a silver lustre ; but none such is known. The potters are spoken of as a class among the descendants of Judah (1 Chron. iv., 23). "The work of the hands of the potter" was familiar to the Hebrew, but none survives to be described.

Recently the discovery of considerable quantities of pottery in Moab has been announced, and the vases, more or less covered with inscriptions in high-relief, have been submitted to the examination of European scholars, who are divided in opinion as to their character. Some accept them as genuine antiquities, while others pronounce them modern forgeries.

V.—GREECE.

The splendor of that civilization has not been fully recognized which, in the fourth and fifth centuries before the Christian era, was illustrated in works of art, the objects of admiration and of rarely successful attempts at imitation, in all subsequent ages. The art is known, and its position among human arts acknowledged. The grade of civilization is less appreciated. The products of high art are a good measure of civilization. It does not follow, because, in one or another department, a nation's productions are inferior, that the nation is to be regarded as barbarous. This or that art may have been unknown or neglected. A thousand years hence it may well be that arts now despised will be cultivated, and arts now cultivated will be unknown or poorly practised. But the nation whose literature, sculpture, and vases are so highly ranked even by the standards of modern times, having indeed manners and customs differ-

ing from ours, was a nation of the highest place in a civilization equalling, if not surpassing, any of later days.

The origin and growth of that civilization are little known. Enthusiasts find in the Homeric poems the evidences of a Greek civilization coeval with Solomon, or antedating him; but the heroes of Homer (whatever be the date of their creation in song) have strange traits of barbarism, and the chivalry of the *Iliad* is of that sort which in the knightly passage at arms drops the sword to seize a stone and hurl it into the face of an antagonist. Whatever view is taken of the period of Homer, or the origin of the books of the *Iliad* and other Homeric poems, neither they nor any other of the fragmentary remains of early Greek song help to much knowledge of the origin or progress of Greek civilization and art. Out of a period of obscurity, vague tradition, myths of imaginative brains—a period inhabited by heroes of romance, possessed of such arts as fancy had given them—the Greek civilization suddenly blazes with all the brilliancy of sculpture, painting, and literature. What was its origin? Whence did it come? Was it a growth of long centuries, from Pelasgic beginnings, or was it a late result of contact with other nations possessed of arts and histories? The pottery of the Grecian islands may help to answer these questions.



41. Greek Amphora. Figures in black on red. Theseus and the Minotaur. (Trumbull-Prime Coll.)

The origin of the tribes commonly designated as Greek was, of course, Asiatic. They had crossed from Asia to Europe at an early period after the Dispersion, and scattered over the country now known as Greece, settling also in many of the islands of the Eastern Mediterranean and the Archipelago. While some of them were content to lead the humblest lives on the products of the soil cultivated by constant labor, others, in course of time, formed themselves into predatory bands, roving from place to place, and, by their superior force and training as fighting men, were able to compel a support from the more honest and simple husbandmen. A community of language was for many centuries the only mark of family union among these various tribes. Without written language



42. Early Greek Kylix.
(Cesnola Coll.)

the bond of union was feeble, and the entire race was, in effect, barbarian. The population of Greece and the Greek islands was at first small and scattered. Central points of importance grew to have names as cities because they became the strongholds of the predatory tribes. None of these appear to have preserved the history or any distinct knowledge of their ancestral home in Asia; nor for many centuries did they possess any characteristic arts. Dim traditions existed of an Asiatic power coming to teach the Pelasgic tribes the first lessons of civilization. Now and then it may have been that strangers from Egypt, like the fabled Cecrops and Danaus, or from Asia like Pelops, came to Greece, but if so they left no evidences of their influence which can be traced, except the truth that the Greek alphabet came from the Phœnician, and possibly Cadmus did found the Bœotian Thebes. Certain tribes, growing in physical power, made occasional excursions into other countries on the islands and on the Asiatic coasts, conquered and possessed cities which had more or less art education, and thus learned abroad and brought back to Greece the rudiments of that art which was afterward so brilliant.

Emerging from barbarism, and coming into association with races who were possessed of ancient family histories and arts handed down from remote ages, they desired a similar history for themselves. The Egyptians, the Hebrews, the Assyrians, and possibly the Phœnicians, had libraries of written history of their ancestors. The Greeks had no such literature. They had only the old recitals in song and rhythmic verses which, like the Norsemen and other uncivilized races, their men and women and children had delighted to hear poured out by wandering rhapsodists, who, like the minstrels of later ages, varied their recitals and added romantic inventions here and there to suit the tastes and secure the rewards of this or that tribe. But when it did emerge from barbarism, the Greek mind came, like Minerva from the head of Jove, suddenly full-grown, with unexampled intellectual vigor and ability. Their historians created a history out of the mass of tradition. Events which had actually occurred were mingled with events the fiction of the imaginative Greek mind of the earlier days, rarely, if ever, equalled in old or modern times for power of creation and poetic fervor. The explorations of our curious, inquiring, investigating age have furnished, after the lapse of two thousand years, abundant evidence of the fictitious character of many statements of Greek historians.

The rapid advance of Greek literature and art—due, perhaps, as much

to the possession of a free and flexible language as to the superiority of Greek intellectual power—naturally resulted in a pride which is abundantly exemplified among modern nations. In nothing is this pride more frequently illustrated than in the claim of inventions in the arts. No great invention in modern times has escaped the conflicting claims of various nations. So the Greeks, when they possessed literature and arts, began to claim the invention of both. When they had established the personality of their ancient authors, various autonomous cities disputed among themselves the honor of having given them birth. When they began to believe in their own claims to original inventions, different tribes asserted priority of right to the discoveries. In a later period, when Greece had formed relations with, and knowledge of, other nations, intelligent men of course understood the character of the claims made by their ancestors. But modern students have not always recognized the origin of these claims, and hence a frequent assignment to the Greeks of the invention of arts which they only learned at a late period from others, and consequent error in giving to Greek art a greater age than can, with evidence, be affirmed of it.



43. Eumenides. (From a Greek vase.)

Thus the Greeks claimed the invention of letters, although other parts of the world had libraries and abundant literature centuries before the Greeks possessed an alphabet. They claimed the invention of finger-rings, although finger-rings had been the ornaments of Assyrian and Asiatic fingers perhaps from the days of Tubal-Cain, before the Deluge, and abounded in Phenicia and in Egypt, in gold and in pottery, from the earliest times. Samos claimed for Greek artists in bronze, about 650 B.C., the invention of images in pottery. But Corinth disputed the claim, relating the story that the Corinthian potter Dibutades had a daughter who sketched her lover's profile from its shadow on the wall, and the father conceived the idea of filling it up with clay and so making the first pottery portrait. But long before Dibutades was born or Corinth had become the local refuge of a roving band of Greeks, Phenicia had been making great and small images of pottery; and for a thousand years Egypt had produced figures of gods, men, and animals, in unglazed pottery, or adorned with exquisite enamel.

While the remains of archaic Greek pottery have offered some help in conjecturing the truth with regard to early Greek history, these have hitherto been so few, the places of discovery and the classes so disconnected, and their periods so uncertain, that scarcely more light was afforded by them to read Greek history than that history shed on the potteries. Hence the value of the Cypriote discoveries which have been described.

Settled by Phenicians, for ages the seat of Phenician civilization and arts, receiving Greek colonies who conquered and possessed cities, and formed petty Greek powers, each independent, in close proximity to and constant intercourse with Phenician cities also independent, Cyprus probably well illustrates the history of the Greeks on other islands and on the Ionian coast; exhibiting the contact of the Greek mind with old art and the marvellous rapidity with which it seized upon it, stamped it with Greek character, and transformed it into the magnificence which all ages have accepted as the highest object of art attainment.



44. Early Greek Kylix.
(Cesnola Coll.)

While Cyprus thus affords material for the history of Greek civilization, it also affords now, for the first time, a consecutive history of early Greek ceramic art. The order of the illustrations has been indicated in the previous pages: 1, the Phenician; 2, the Egypto-Phenician; 3, the Græco-Phenician; 4, the pure Greek.

It is unnecessary to repeat here the characteristics of Phenician pottery. To study intelligently the effect of the Greek mind upon it, and the development of Greek art out of it, it would be well to consider it in two classes—the one including form, especially statuary, the other including decoration by painting.

In the very long series of pottery images in the Cesnola collection it is easy to divide those with Phenician indications of dress and feature from those with Greek characteristics. It is also easy to place the entire series in order of comparative art merit, beginning with the rudest imitations of the human form, having Phenician types of countenance, made by Phenician workmen, or of animals whose families are indicated only by some one prominent feature, and ending with exquisite statuettes, the work of the ablest Greek artists of the best period. But it is more than difficult—it is impossible—to say exactly where the Phenician art ends and the Greek begins. The two were synchronous in the sixth and seventh centuries before Christ. Even the discovery of articles in a Phenician or a Greek tomb is not evidence of the nationality of the

maker, when the two peoples were neighbors, and their arts were assimilating. Doubtless the works of both ran closely together in character, each copying the other. But the Greeks were always in the lead, and their triumph was complete. Phenician art in pottery, having lasted a thousand years without improvement until modified by the coming-in of Greek intellect and progressive ideas, ceased utterly, while the Greek survived for all time.

In the decoration of vases the distinction is more clearly marked, and the presence of a new intellect is visible from the beginning of Greek work. The Græco-Phenician styles are quite distinct from the Egypto-Phenician and the Phenician, although founded on them at the first. Out of the rude checker and diamond ornamentations the Greeks extracted various combinations of lines for friezes and decorative borders. Out of the systems of circles overlapping each other and crossed by straight lines, the Greek eye selected and improved a variety of bead, drop, and scroll patterns, which always remained favorites on Greek vases. The lines of the rigid lotus-flower were resolved into separate patterns, recombined in conventional forms of exceeding gracefulness, without symbolic meaning, and used solely as ornamental devices pleasing to the eye. Other leaves and flowers first copied from nature, afterward conventionalized, arranged as wreaths or border patterns, indicate a new spirit in the arts of ornamentation. The whole system of decoration in symbolism was abolished, and the new system of decoration to please the eye was introduced. All this preceded the great achievement and glory of Greek decoration, the painting of story on vases.



45. Greek Vase. Fine style: red on black.

The style of decorated vases which has been heretofore regarded as the earliest distinctively Greek has been variously called Doric, Corinthian, Carthaginian, and Egyptian. This variation of name indicates the hitherto puzzling character of the decoration, which consisted in rows of animals—panthers, lions, goats, deer, and birds—usually arranged in friezes around the vase, while flowers are strewn over the field. (See Ill. 46.) Specimens of this class have been found in various Greek localities. Many have been discovered at Corinth. In the Trumbull-Prime collection are a number of specimens found in Southern Italy. As bearing on the question whether the art history in Cyprus is fairly illustrative of

early Greek art history elsewhere, this style of decorated pottery is interesting. Brought under view with an immense number of the vases in



46. Greek Vase, "Doric" Style. (Birch.)

the Cesnola collection, it takes its place at once as an advanced Egypto-Phenician style. But none of this pottery has been found in Cyprus except a single small aryballos, which was in the Kurium temple vaults. Nevertheless, its relation to the Egypto-Phenician is not subject to doubt. The ware is different from any of the Cypriote works. It is heavy, thick, cream-color or cold gray on the surface, with decorations in black, white, and maroon or red, the details of birds and animals, such as

limbs, muscles, feathers, etc., incised in the paste through the color. Some specimens appear to have the thin lustrous glaze; but this may be the result of high polish. The animals have always a remarkably stiff, immovable look, which is thoroughly characteristic. But the Egypto-Phenician decorations of Cyprus are here: animals arranged in rows, the colors, the black and red bands around objects, the lotus-flowers, the large birds. On three vases in our collection are soldiers, almost hidden by their shields. The same design is on the single specimen found at Kurium, and the same also occurs engraved on a gold ring which was among the treasures of that temple. On one vase in our collection is a winged shield, on the shield an asp. On others, the same large bird appears which is so frequent on Cypriote pottery. These vases occupy, therefore, a position in art between the best decoration of the Phenicians and the earliest of the pure Greek. They are of the transition period. Although not made in Cyprus, they show knowledge and education proceeding from acquaintance with either the arts of Cyprus or kindred arts of Phenicians in other localities. There is every probability that explorations in other Phenician countries will bring to light other local series of the Egypto-Phenician predecessors of this style of Greek art. It may be regarded as reasonably certain that this class of vases illustrates the first great improvements made by the Greek mind on the decorative styles of their predecessors. But the style was far from satisfactory to the progressive intellect and taste of the Greeks, and was soon abandoned. It is possible that in the later periods of skilled Greek art this archaic style of work was reproduced for lovers of the antique.

The step which was next taken by the Greeks was a gigantic stride. They had introduced into the ceramic art the idea of decoration for beauty, and discarded the old prevailing notion of using it for religious symbolism. Now came the idea of illustrating story. In our age of pictures and illustrated books, it seems a simple idea. So is writing, printing; so is a magnetic telegraph. But the beginnings of invention are more marvellous than their progressions from step to step. The first invention of a sign to express to the eye the sound of the voice was a greater invention than the printing-press. The first rude picture which told in silence a complete story was a more marvellous work than Kaulbach's frescoes in Berlin.

Was this new use of art a Greek invention? Egypt had practised it two thousand years. The Egyptian hieroglyphic writing, in its system of determinatives (an occasional picture to explain the definite meaning of the preceding signs), contained the very essence of the art of illustration. There is no evidence that the Greeks derived this idea from Egypt. It may have been an original Greek conception. They claimed it as such, but did not date the discovery in very remote times. Homer says nothing of painting at the time of the siege of Troy. The Greeks ascribed the beginning of the art among them to the island of Sicily, where outlines were made; but the custom of filling up the outlines with color they regarded as later.

Paintings are mentioned at Phocæa in 544 B.C. Cimon of Cleonæ is the earliest Greek painter mentioned. His date is uncertain, but probably between 550 and 500 B.C. To Polygnotus, a contemporary of the sculptor Phidias, about 450 B.C., was ascribed the first great improvement in the art from the archaic stiffness, and he was said to have been the first to paint the open mouth showing teeth. We shall see very soon that a century before Polygnotus a lion was painted by an unknown artist with open mouth and white teeth. The Phenicians had not painted subjects until after they had come into contact with the Greeks. Phenician vases with chariot scenes, with animals browsing, and other representations of action, are to be classed as of the



47. Greek Amphora, Medea.

Græco-Phœnician period. Egyptian subject painting on vases had been confined to a few rude outlines, chiefly of funereal or mythological scenes of the character in the illustration (9) on page 36.

Wherever the Greeks found this idea, they now began for all subsequent ages the custom of telling stories, recording history, perpetuating mythology in pictures. Henceforth the glory of Greek romance in song is to be illustrated with abundant paintings. For the purposes of this art they found that kind of pottery best suited to their ideas which the Phœnicians had long produced in brick-red color, decorated with circles and bands in black, and covered with their lustrous glaze, which has been described among Phœnician potteries as Class 7. They varied it by giving the surface sometimes an artificial buff or yellowish-red color.

Among the objects found by General Cesnola in the treasure-vaults of the Temple of Kurium is a single vase of the new class now under consideration, which, for various reasons, may be regarded as one of the earliest Greek works of the kind. This vase—a hydria—is of the red lustrous ware. The neck, foot, and one half of the body are painted black. On the half of the vase remaining red are two decorations: above, two lions facing each other, painted in black with maroon necks and heads and touches of white, the mouths open, with white teeth. These are in precisely the same style of drawing and execution with the animals on the earlier vases in the style known as Doric. Below is a picture of Hercules contending with a lion, in the same style and colors. An eagle is above the hero, another above the lion. A simple border, formed of heart-shaped leaves in black, is on each side of the red ground. The muscles and details of the figures are indicated by lines scratched in the surface after baking. The bright-red paint of the Phœnicians is here changed to a dull maroon. Inscriptions in black are numerous, but not clearly legible, though some letters are perfect. These suggest possible allusions to various events in the life of Hercules, but they are not intelligible. Over the hero his name is legible, one letter missing.

The inscriptions are separate words, over the lion, and here and there around the scene. The letters are not always legible, nor are they all Greek. The following are only remote approximations to some of them, and the characters are not fac-similes. Thus the character Γ may be a Greek P , and others may be Phœnician. We give them only as generally descriptive, and not as accurate interpretations:

IV*EV
 \triangleleft *IVI

SOITAX
 NFID+I

SEVOEV
 XIASSA+I+

HEPAVES
 NESN

The style of painting animals on this vase bears such close resemblance to the so-called Doric decorations that no doubt can exist of its close relation to that class. It is an early specimen of the new style of Greek art, which soon after this dropped the ancient style of painting animals. The teeth of the lion are white, and white has been used in the other decorations, but is not under the lustre, nor apparently fixed by the baking, as it easily rubs off.

With this vase, in the Kurium vaults, were found several kylikes and a large bowl, in the more advanced style of painting subjects in black on red, evidently the work of more skilful artists in a somewhat later period. If, as is supposed, the date of the destruction of this temple was about 550 B.C., these vases are highly important as establishing the fact in Greek art history that the decoration of vases with subjects in black on red had advanced to a high degree of perfection in the middle of the sixth century before Christ.

Thus much of the history of Greek art as illustrated by the potteries of Cyprus. From the date of the first painting of subjects, the advance of the art was steadfast until its culmination in the productions of the fourth century before Christ—the Golden Age of Grecian civilization.

The customary classification of Greek painted vases is in five divisions:

1. The earliest style, heretofore described, known as Doric, etc., of which the type is the representation of animals and flowers, usually in friezes or bands on cream-colored or gray pottery (Ill. 46).

2. Vases of red lustrous pottery on which the figures are painted in black (Ill. 41).

3. Vases of the same pottery on which the backgrounds are black, the figures being in the red or yellow of the pottery.

4. Vases of the same general style with the last, decorated in florid style, with arabesque and other ornamentations, often introducing Eros (Cupid), and sometimes gilding.

5. Vases with white surfaces, painted with figures, sometimes in outline, sometimes in several colors.

Besides these styles, others were occasionally used. Vases ornamented by flutings; with moulded reliefs; decorated in black only; in opaque



48. Dionysus. (From a Greek vase.)

white on black; in pale-yellow and brown with white on black; vases in the forms of animals, birds, human heads; in short, an innumerable variety were produced. The five principal styles, however, were vastly more common than any other. The red color varies to a yellowish shade. Both were artificially produced, heightening by an earth or pigment the natural color of the clay. The black was applied as a thick paint, sometimes burning to a greenish shade, and occasionally to a metallic iridescence. The details in subjects painted in black—features, muscles, lines of dress, feathers, etc.—were incised through the paint. White was used for female faces, and on parts of armor and dress, and maroon was sparingly employed in parts of the designs. The vases were usually painted black, leaving open spaces of the red on which the paintings were placed.

The best period was reached when the figures were executed in red, with the details pencilled in black. The advance of art is visible in these. The earlier are stiff and hard; the later free, artistic, the countenances for the first time having expression and variety, figures and costume possessing grace and delicacy. The ornamentations on the necks and smaller parts of objects included a great number of patterns, sometimes used purely as suitable and beautiful, sometimes in reference to the subject painted. Accessories were occasionally introduced as explanatory—a bird to signify that the scene was in the air, a fish to indicate a marine subject, etc. The “fine style,” so called, was characterized by the perfection of the drawing, the figures being in red, the ornaments and inscriptions in white. “All that is known,” says Mr. Birch, “of the style of painting of Polygnotus, Parrhasius, and Zeuxis may be traced in the designs of these vases; while the later ones, in the isolation of the figures upon larger plain surfaces and the elongation of forms, approach the known canon of Lysippus, and blend into the immediately subsequent style, which just preceded the final decadence of the art of painting vases.” This subsequent style was the florid, in which ornament is increased to lavishness, the figures are more full and round, polychrome decorations are introduced, and a general luxury of art without simplicity characterizes the vases.

The illustrations will give some idea of the styles of delineation in the best periods. “The Last Night of Troy” (Ill. 49, reproduced from Mr. Birch) is an extract from a painting on a vase in the museum at Naples, in which many events in that scene are depicted with great power.

The first style has been dated as prior to 500 B.C.; the second from 500 to 400 B.C.; the third, regarded as including the finest style, from 400 to 250 B.C.; the fourth from 300 B.C. to the decadence in the second

century. The fifth style was probably of the same periods with the third and fourth. The first was probably used throughout all the periods.

The union of the two colors in pottery, black and red, fully satisfied the Greek lover of the beautiful, and these are the colors of much of the best Greek pottery, in no way relieved as to general effect by the slight use of dull maroon and white. Rare specimens have figures in white on black grounds, and some have polychrome decorations.

There is no disputing about tastes. The Greek was no less a man of taste than the American, though he preferred to drink wine at feasts from a black earthen kylix decorated in red, or a red cup with paintings



49. The Last Night of Troy. Cassandra seized by Ajax at the Palladium. (From a vase at Naples: Birch.)

in black. He had glass, and plenty of thin and beautiful glass, in cups and goblets of varied form. He had wine equal to the best of the Côte d'Or or the Rhine banks. At his feasts poets, soldiers, statesmen gathered; jewels adorned their arms and fingers, rich garments made the assemblies gorgeous, flowers filled the halls with perfume; statues of snowy marble, the works of artists whose fame is enduring, paintings by Zeuxis and Apelles, looked down on the scene. All that the most refined civilization could invent surrounded him. We are but poor and far-off imitators of the luxury and splendor of that civilization, and we have small claim to set up standards of beauty by which to measure it. One of the most important lessons of art, to be learned from this fact in Greek

ceramic history, is that all standards of beauty in color as in everything else are arbitrary. The time may and probably will come in the future when another civilization will look with wonder at our standards in music, painting, clothing, color, at our tastes in many arts, and regard them as more inexplicable than we now regard the Greek taste in using black and red for the colors of gayety and splendor.



50. Calypso. (From a Greek vase.)

The subjects on Greek vases are of vast variety, almost as great as the number of specimens now in the museums of the world. This number was estimated by De Witte at fifty thousand, but Dr. Birch places it at twenty thousand of vases of all kinds.

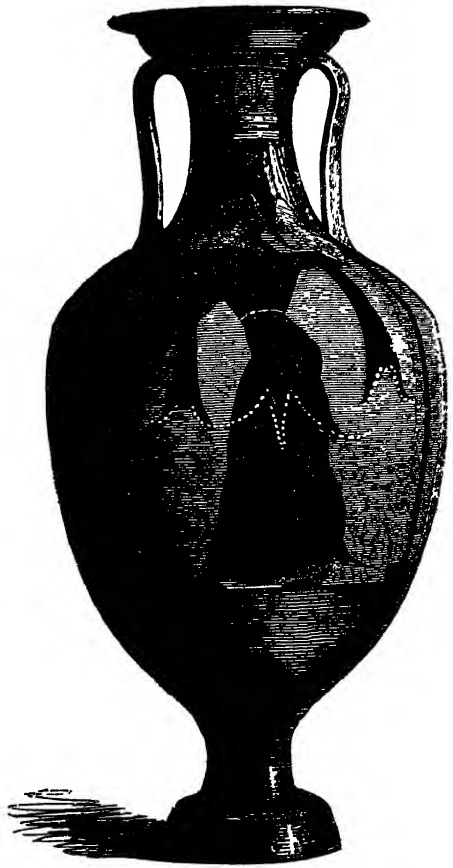
These subjects are chiefly of four classes: 1. Relating to mythology; 2. Relating to the Heroic Age and traditions of early Greek history; 3. Relating to known history; 4. Relating to contemporary manners and customs. Among the vast number belonging to the first and second classes are not only numerous pictures which are recognized from knowledge of the mythology, poetry, and traditions of the Greeks, but also many which are unexplained by any extant literature. The songs of many ancient poets are lost, while the illustrations of their songs remain on pottery vases.

A study of Greek vases can be made intelligently only as accompanied by a study of Greek history and literature, and an appreciation in some sort of the Greek mind. The chief bond of the various Greek tribes was their common language, not identical, but sufficiently alike in different families to sustain intercourse. The epics of Homer and the Cyclic poets had been recited among the Grecian families before written language was generally known among them, and thus arose a community of traditions relating to the Heroic Age, which was another bond. The Olympiads date from 776 B.C., when Lyeurgus and Iphitus established, or revived, the Olympian games. The various cities of Greece remained independent, but the "Iliad" and "Odyssey" were the common property of all Greeks, and were as familiar in the seventh century before Christ to the uneducated tribes of Greece as the Bible is to modern Christians. It was not till about 530 B.C. that the books of Homer were rescued from confusion, and arranged. Other epics were popular, abounding in romantic story. All these were handed down from lip to lip and generation to generation long before they were committed to writing. Men boasted

of their ability to repeat them from beginning to end. When painting became an art known to the Greeks, they used it to illustrate the stories with which every Greek household was familiar. Hence the thousands of vases now known, and countless thousands more, on which the paintings represent the stories of heroes, demi-gods, and gods, from poems which were the delight of every Greek.

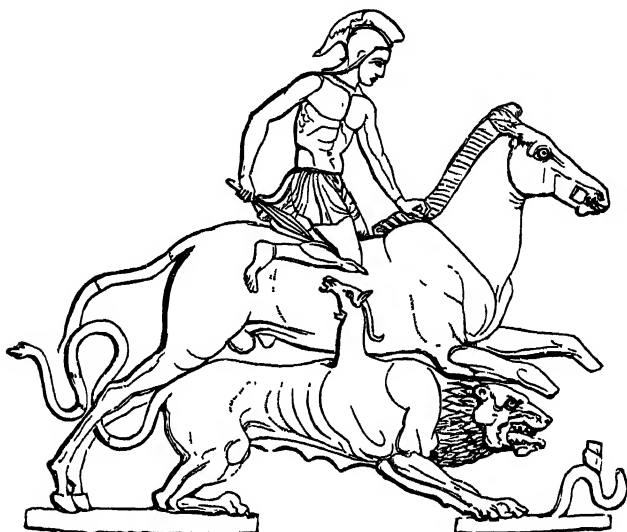
Varying these designs were a few, but very few, representations of known history, and many of contemporary life, from which we derive a great amount of information of Greek customs.

Artists' and potters' names occur frequently on Greek pottery, sometimes the artist and potter being the same. On a superb vase in the Campana collection, with the subject Hercules and Nereus, are the words ΤΙΜΑΓΟΡΑΣ ΕΠΟΙΕΣΕΝ. One other vase is known by Timagoras. Nikosthenes was a potter whose name has been found on fifty vases, which present also peculiarities of work, such as tall and slender forms of amphoræ, with broad flat handles. Panphaios, or Panthaios, made drinking-cups (kylikes). Seventeen are known with his signature. Artists also signed their work, and it is probable that some were famous and their paintings much sought. The same artists worked for various potters, and their names are found together. Epiktetos, a famous early painter of red figures, worked for many potters whose names are found with his on vases. Klitias painted one of the most renowned vases known—that styled the François vase—in black figures, representing a considerable portion of the history of Hercules. Exekias was an early potter and artist, by whom many specimens are known. The pride



51. Panathenaic Amphora: Inscription, ΤΟΝ ΑΘΗΝΕΩΝ ΑΘΛΟΝ. (Louvre.)

of the potter and of the artist is often illustrated by the personification of the vase in the signature, which says, "Exekias made and painted me;" "Chares painted me;" "Tlenpolemos made me;" "Ergotimos made me;" "Klitias painted me."



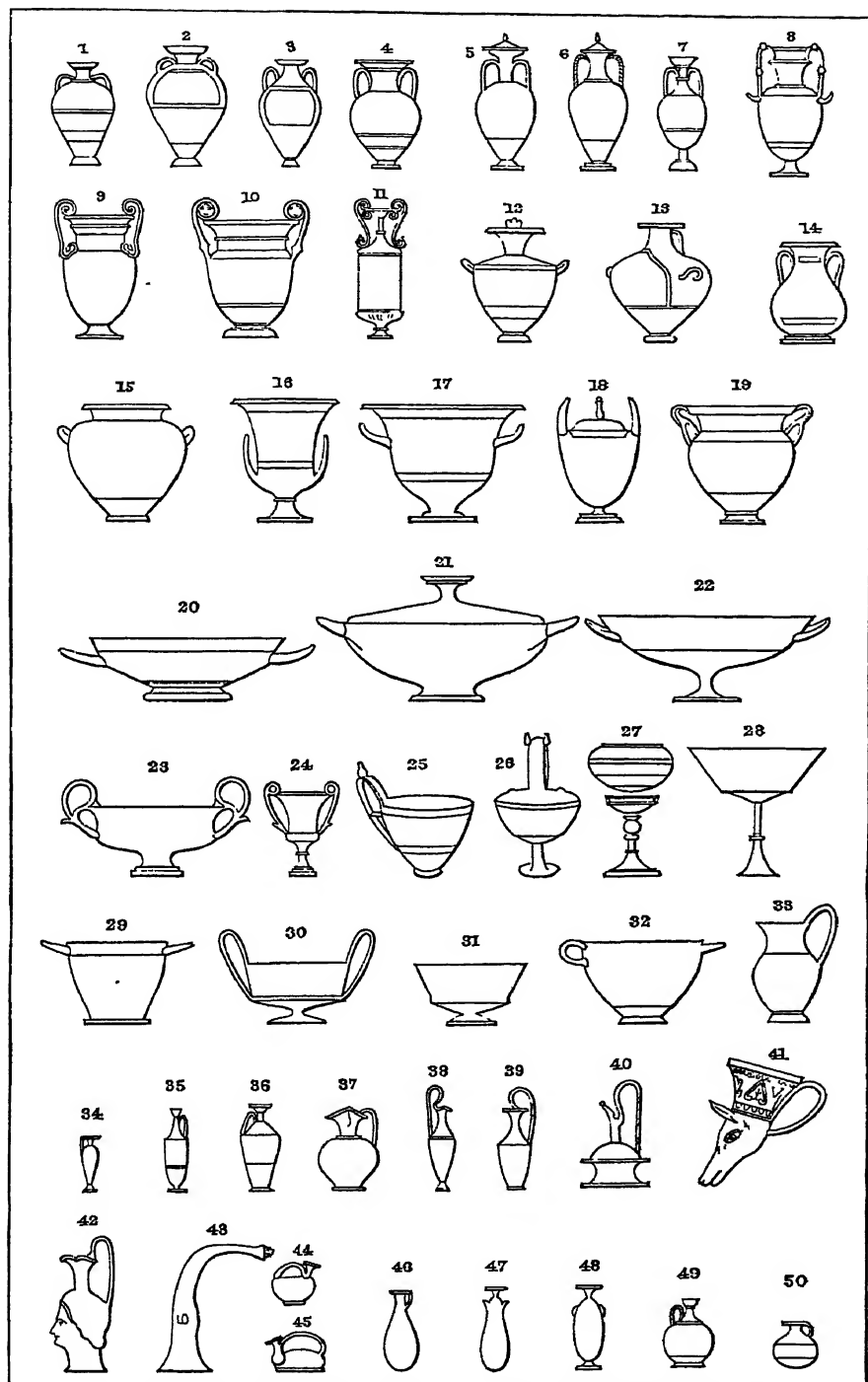
52. Bellerophon and the Chimæra. (From the terra-cotta in the British Museum.)

The forms in which the Greeks made pottery were many. It is not always possible to determine the precise form indicated by the name of a vase or cup found in Greek literature, but the accompanying illustration (53) will show the greater portion of known forms, others not illustrated being usually variations of one or the other of these. The list of names which follows is founded on the best authorities among modern scholars.

VASES ILLUSTRATED ON OPPOSITE PAGE.

(Only forms, and not comparative sizes, are indicated by the cuts.)

1. Egyptian Amphora.	15. Stamnos.	29, 32. Scyphos.
2. Tyrrhenian Amphora.	16. Krater.	33. Olpe.
3, 6. Forms of Panathenaic Amphoræ.	17. Oxybaphon.	34. Kotyliskos.
4. Bacchic Amphora.	18. Stamnos of Apulia.	35, 36. Lekythos.
5, 7, 8. Forms of Amphora.	19. Kelebe.	37. Oinochoc.
9, 10. Krater, with volute handles.	20. Lepaste.	38, 39, 42. Prochoos.
11. Thymiaterion.	21. Lekane.	' 40. Epichysis.
12. Hydria.	22. Kylix.	41, 43. Rhyton.
13. Kalpis.	23. Karchesion.	44, 45. Ascos.
14. Pelike.	24, 30, 31. Kantharos.	46. Bombylios.
	25, 26. Kyathos.	47, 48. Alabastros.
	27, 28. Holmos.	49, 50. Aryballos.



53. Forms of Vases. (From Westropp's "Hand-book of Archaeology.")

Inscriptions on Greek pottery are numerous, both painted and incised. Oftentimes each figure in a painted subject has the name near or on it. Abbreviated forms of spelling are common in these; letters are omitted; where double letters occur, one only is used. The names of men are sometimes accompanied with adjectives, as "The beautiful Hector," and occasionally inscriptions represent what the person is supposed to be saying. Thus Silenus says, "The wine is sweet;" a man lighting a funeral pyre says, "Farewell;" a boy playing ball says, "Send me the ball." On cups "Hail to you, and drink well!" is a not uncommon legend. The prize vases of the Athenian games were inscribed, "I am a prize from Athens" (Ill. 51). Names of persons with the epithet "beautiful" are of frequent occurrence, often of boys and females. Thus vases have "Dorotheos the boy is beautiful, the boy is beautiful;" "Stroibos is beautiful;" "The beautiful Nikodemos;" "Oinanthe is beautiful;" and one vase has "Beautiful is Nikolaos; Dorotheos is beautiful: it seems to me one and the other boy is beautiful. Memnon to me is beautiful, dear." The frequency of this style of inscription has led to much discussion of its origin and intent, without satisfactory solution. It has been suggested that they referred to children, and were presents, or that they have allusion to victors in games, or to persons specially popular among a people who loved beauty, and that potters placed them on vases to suit public

taste. Inscriptions intentionally illegible are of frequent occurrence, and unexplained.

Owners incised their names on vases and cups, thus: "I belong to Tromios;" and occasionally added warnings such as boys used to write in school-books: "I am the Lecythos of Tataies, and may he who steals me be blind!" "I am the cup of Kephisophon; if any one breaks me, let him pay a drachma: the gift of Xenokrates."



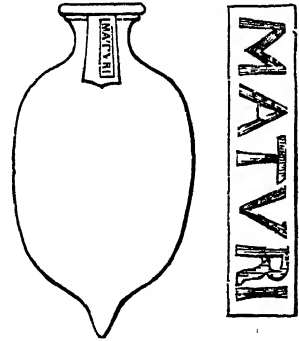
54. Diogenes in his Tub, or Pithos. (From a Roman lamp)

The largest pottery object made by the Greeks was the *pithos*. It was common also to the Egyptians and the Romans, and among all nations

served the purposes of a cellar for the storage and preservation of all kinds of provisions. It was moulded with clay around a frame. Its gigantic size well fitted it to be, as it often was, the refuge of the poor seeking shelter. This was the tub of Diogenes, who is represented on a Roman lamp, seated in the mouth of an old broken pithos, receiving the visit of the Macedonian hero (Ill. 54).

The most frequent form of vase was the *amphora*, also an ancient Egyptian and Phenician form. It was of long cylindrical or ovoid body, made in all sizes, from the small drug vase two or three inches high to the large receiver of oil, grain, fruit, wine, or water. Originally the base was pointed, to be pressed into the sand or soil, and thus hold the vase upright; but later, and always in ornamental vases, the pointed base was surrounded with a small foot. The invariable two handles gave the name to the vase. This was a favorite vase for decoration, and, thus finished, was a noble household ornament and adornment on festal occasions.

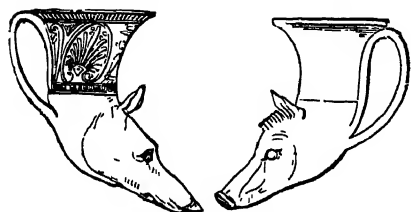
From the early days of fine pottery, the Greeks admired it, and the art was cultivated by the patronage of the wealthy and refined. Superbly painted amphoræ were frequently prizes of victors in the games. Panathenaic amphoræ, prizes in the Athenian contests, are among the noblest relics of Grecian art (Ill. 51). The amphora, made of coarse unglazed pottery, was the common vehicle for the preservation and transportation of wines, oils, and fruit. Rhodian amphoræ went to all parts of the Eastern world. These often had the makers' names stamped on the handles, and sometimes the name of a magistrate, around a stamped device. Thus the symbolic rose of Rhodes frequently appears on amphoræ, as on coins of that island.



55. Amphora with stamped Handle.

The *krater* was a gigantic punch-bowl, from which at feasts the mixed wines were dipped out in the *oinochoe*, or wine-pitcher, and poured into the various forms of cups held by the guests. The *oinochoe*, borne by a page, must never be placed on the *krater*, for that implied that the wine was exhausted and the feast was ended. The most common form of cup was the *kylix*, varying in shape, but always the same in general character—a broad, shallow cup six to ten inches in diameter, usually with handles. The guests in the symposium are represented on painted vases, twirling the *kylikes* on their fingers, as in the illustration (62). The *rhyton* was another form of drinking-cup, in a variety of shapes, some-

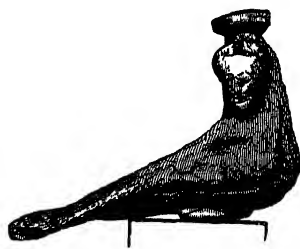
times that of a horn, more frequently with its foot extending into the head of a deer or other animal. It could not be set down till emptied.



56. The Rhyton.

The *prochoos* was the ordinary jug or pitcher, used, like modern pitchers, for all liquids, and, like them, varying in form. The *epichysis* was a little perfume or oil pitcher, most frequently made in metal, but often in pottery. The *oxybaphon* was used to hold vinegar for table use. The *kantharos*, a cup with a high handle, was the ladle. In short, the form in general suggests the use of the article, and it is a safe rule in antiquarian research, when seeking the probable purpose of an object, to ask, "What would we use it for?" An explorer once, in our presence, showed an American gentleman a curious object in ancient pottery, and asked him what he supposed it was. The American instantly replied, "When I was a boy in the country, we used just that shaped object in tin to hang on the wall and hold a candle, and I should call it a sconce." The astonished explorer exclaimed, "I have shown it to scores of people. One thought it a chariot box, another a sacrificial vessel—no one knew it; but you are right, for I found it hanging on the wall of a tomb, and here is the pottery lamp which was in it."

The Greeks made pottery for as great a variety of purposes as any ancient or modern people. Bricks and tiles were used as we use them, for architectural and other purposes. When the custom prevailed of burning the dead, vases were used to receive the ashes. Sepulchral vases were of many forms, and sometimes costly vases, which had been treasures of art to the living, were devoted to the final use of holding their dust. The ashes of the victor at the games sometimes reposed in the vase which had been the prize of his triumph. The larger number of vases and objects in Greek pottery which have been recovered in modern times were deposited with the dead as furniture of the tomb. In frequent cases numbers of vases, large and small, are found in one tomb, standing on the floor or hanging on the walls. These sometimes appear to have been articles prized by the deceased while living, and placed by his body with some sort of feeling, not without occasional illustration in our own time, which finds com-



57. Greek Bottle found in Cyprus. (Cesnola Coll.)

fort in leaving the dead accompanied by some of the associations of life. Many of the vases decorated in colors on white grounds seem to have been made for sepulchral uses, and were placed in the tombs immediately after finishing. The decorations of these are in water-colors, not fixed, but easily rubbed off by handling. Some of these are among the most delicate and beautiful works of Greek art. The colors are frequently missing, having fallen off or disappeared, leaving only the outlines, traced with delicious taste and skill. Other vases have fixed white grounds. There is not space for description of the exceptional forms and colors in which pottery was made and decorated by the Greeks. A small bottle in the Cesnola collection is in the form of a dove with human head (Ill. 57). Another, only three inches long, is a perfect representation, in form, color, and surface roughness, of an almond.

The ornamental statuettes of the Greeks in pottery ranked in comparison with all other ancient and modern art as highly as Greek sculpture in marble. Exquisite little images are found in great numbers in various localities—at Athens, Tanagra, in Cyprus, and elsewhere. These were sometimes brilliantly colored, occasionally only washed with white. In the Metropolitan Museum of Art are many examples of this delicious work. A small image of a child waking out of sleep is an exquisite specimen. The bottle which is illustrated (58) in the form of a sleeping slave of giant muscle is beyond praise.

The places of manufacture were scattered throughout the Greek cities. Prior to the Cypriote discoveries, the most ancient vases were supposed to be those found in Asia Minor, and numerous potteries existed there, where, as in Cyprus, the Greek



58. Bottle in Form of a Sleeping Slave: Greek Pottery, unglazed. Found at Amathus. (Cesnola Coll.)

civilization sprang up in close contact with the Phenician. Throughout the Greek islands, at Corinth, and elsewhere on the continent, were manufactories of pottery for local use and exportation. Athens, however, had the highest reputation for ceramic work. Two sections of the city devoted to potters—one within and one outside the walls—were known as the *kerameikoi*. Remarkably beautiful vases have been found at Athens in which the decorations are on white grounds, in colors. All varieties of pottery were here made, and many of the most superb specimens in museums are probably the work of the Athenian ceramists.

The noble vases and other works in pottery which have been found in immense quantity in Southern Italy, and which were formerly supposed to be Etruscan, are now known to be Greek; and a very large por-



59. Latona. (From a Greek vase.)

tion of the Greek vases in collections are from that part of the world. Many of these were sent from Greece to Italy; but Greek potters also went to Italy, and there pursued their work. Greek pottery of all periods, from the earliest, is found in Magna Græcia. It is supposed that many of the finest specimens found in Italy were made at Athens. The Phenicians, who had been surpassed by the Greeks as manufacturers, were still the commercial people of the East, and Phenician ships carried the Athenian pottery to all parts of the known world.

Samos was an early seat of pottery. The oldest known description of the art is contained in some lines attributed to Homer. The story is told in the life of Homer (by Herodotus?) that the poet was driven by a storm to take shelter in a pottery in Samos, where he passed the night, and was found in the morning by the potters, who recognized him, and demanded a song, promising therefor a vase. Homer thereupon sang the "Song of the Furnace," in which he invokes Athene, praying that the vases to be made may not be burned black, but all baked at the right heat, and come out good merchantable ware; and in the event that the potters do not pay him his promised reward, he adds imprecations, invoking fracture, warping, too great baking; especially praying that irrepressible fire may melt the contents of the furnaces in masses that will horrify the potters, that cracking sounds may come from the furnaces, and the vases be broken to pieces.

The clay of Samos was celebrated, and the pottery distinguished for

its hardness. Here was made the rich red ware known as Samian, which became a favorite pottery of the Romans, used by them for domestic purposes, even for dinner services. It was of a fine bright, artificial red, highly polished on the surface, with a thin lustre, produced by the unknown glaze or by the polishing. These wares were popular everywhere for common use as cups, bowls, jugs, and general domestic purposes, and were sometimes ornamented by patterns engraved on the surface or reliefs applied.



60. Greek Kylix. Red ware. (Cesnola Coll.)

Fragments of broken pottery were commonly used by the Greeks for writing purposes, as a substitute for papyrus or parchment. The word *ὄστρακον* (*ostrakon*) signified "pottery" as well as "a shell;" and it is by some insisted that ostracism was so called because the votes for and against banishment were written on fragments of pottery, instead of the received idea that the Greeks voted with shells.



61. The Pyrrhic Dance. (From a Greek vase.)

Specimens of enamelled pottery have been found in Rhodes, Cyprus, Southern Italy, and elsewhere, which have been supposed to be Greek work. These are generally small objects, often very beautiful. The enamel is like the Egyptian, blue or green, the ornamentation consisting of zigzags, and lines of white. A single specimen of this ware, representing a lotus-flower, in pale blue with inlaid lines of white, was found at Kurium. These pieces are not common, and if not of Egyptian manufacture, certainly do not seem to have been a product of Greek art in general, nor so popular as to be in wide demand. The Greeks confined themselves, with rare exceptions, to the lustrous ware. Objects of undoubted Egyptian ware, of enamelled pottery, are found in Cyprus, Southern Italy, and elsewhere, and were evidently articles prized by the Greeks.



62. Symposium. (From a Greek vase.)

Another class of ware is found occasionally, which is moulded, with

vines, fruit, etc., in relief, colored and glazed. This is probably of late period—possibly Roman. On a very beautiful cup of this ware found in Cyprus, the glaze has undergone the same change which occurs in ancient glass in that island, being decomposed and finely iridescent. Before the Christian era Greek ceramic art had passed through its finest period and decadence. The Romans had little taste for such work, and pottery became again, as it had at first been, a material devoted to purposes of utility rather than ornament.

VI.—ETRURIA.

So long as it was supposed that the magnificent vases found in such enormous quantity in the sepulchres of Italy were the work of Etruscan potters, the highest interest attached to the ceramic art of that people. But when it became clear that these were Greek, the scope of the Etruscan art in pottery was exceedingly narrowed, and it possesses but little interest.

The Etruscans were Phenician in descent and character, and there is much in their arts which indicates that they were always in close alliance and communication with their relatives in the more eastern part of the Mediterranean. Much fine work in metal and engraved stone is still assigned to them because found, as were the vases, in their country. How much of this was in reality Etruscan, and how much the work of Phenician artists elsewhere, it does not concern us to discuss here.

Their oldest pottery, dating probably from a period before 700 B.C., seems to have been a somewhat rude ware in dark grayish-brown color. Possibly wares in black are equally ancient. Both wares continued to be made for a long period, and the black was that in which they approached most nearly to the production of high art.

They made four kinds of pottery—brown, black, yellow, and red. They also made unglazed wares, decorated with surface-paintings not baked. Of the latter the most remarkable objects are sarcophagi of red and of yellow clay, with reliefs, and on the covers recumbent figures. The whole was washed with white, on which were paintings in brilliant colors. Some of these were large enough to hold the body, but the majority were small, serving the purpose of urns for the ashes of the dead.

In the brown ware curious small vases were made, in the shape of huts, decorated sometimes with bars to indicate the beams forming the roof of a cottage, and with bosses. These were also used as funereal

urns. The decorations on the brown wares in general were of the primitive sort, in incised lines and rude reliefs. Wine and water jugs, cups, and other objects are known.

The black wares are of various thickness and merit in different localities. The ornaments are incised or in relief, occasionally well moulded. Animals, flowers, etc., are in friezes, sometimes made by impression with a cylinder rolled over the wet paste. There is much that recalls the Phœnician work in the character of these decorations, and often a suggestion of the arts of Nineveh and Babylon. The Etruscans certainly had commercial intercourse with Egypt, and much that is Egyptian is visible in their art. A class of vases closely resemble the kanopos of Egypt, the vase described as intended to hold the entrails of the dead. These, moulded to represent the human figure, and holding the ashes of the Etruscan dead, were placed in tombs in chairs of wood or of pottery.

In-red pottery were made pithoi ornamented with reliefs and friezes, which are of very ancient periods. Mr. Birch supposes some of them to date about 700 B.C.

The yellow or buff ware is very like the wares of the same kind made in Cyprus, especially vases in animal shapes, and representations of Venus.

The Romans described the Etruscans as excelling in making statues of pottery and architectural ornaments. But few specimens of their work remain, and those few are not remarkable works of art.

When the Greeks first came into Italy they brought few arts with them; but as the ceramic art advanced in Greece, fine works were sent to the colonies in Magna Græcia, now become important cities, and potters emigrated thither. The Etruscans admired and imitated, afar off, the Greek work; but the Etruscan never excelled as a potter, and none of his works were approximations to the originals he desired to reproduce. Vases with figures in black on red and in red on black were made, but in poor style. The red, instead of being left in the surface color of the pottery, was laid on in a clay wash over the black, with which the vase had been coated. The subjects painted were chiefly from Greek mythology and story. No original Etruscan art is found, although occasional representations are seen of Etruscan divinities and demons. Inscriptions occur in the Etruscan language. Some of these vases are of later period, bringing the art down nearly to the Christian era.

VII.—ROME.

The long history of the Roman power is marked by very little ceramic work which can be regarded as of high art, although no people of ancient or modern times appear to have made such extensive use of pottery for purposes of architecture and general utility. Bricks were made in great quantities, and tiles for roofing, drainage, and other purposes.



63 Charon, Hermes, and a Human Soul.
(From a Roman lamp)



64. Hercules and the Nemean Lion.
(From a Roman lamp.)

These objects had stamps, which the law required makers to place on their works. The stamps give names of makers, of owners of clay-pits, of consuls, with dates, and are of the highest importance for the historical information thus preserved. Graves were enclosed with tiles, and the stations of Roman legions in various parts of the world are ascertained from the stamps on tiles in soldiers' graves. All the useful forms of tiles known to us were common to the Romans. Roof tiles, wall tiles, flues for hot air, mosaic pavements, were made of pottery. The inscriptions found on these are the predecessors of factory marks found on modern pottery and porcelain, some of them giving the date, the name of the proprietor of the estate where they were made, the potter, and even the slave who moulded them. Cornices, friezes, gutters, and spouts were made. Ornamental work for architectural use was painted in colors



65. Roman Pottery.
A Grotesque.

—black, red, blue, green, and yellow.

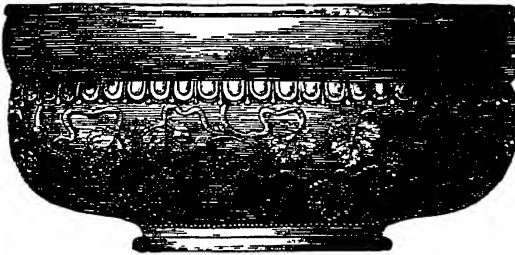
In early times Greek and Etruscan potters made statues for Rome,

and these were abundant till the Imperial period. Small statues and figures were in favor and common with the Romans, representing a great variety of subjects, mythological and real. Actors, buffoons, dwarfs, portrait figures abound. Wherever the Roman power extended in Europe these figures are found in quantity. They were called *sigilla*, or *sigillaria*; the last days of the Saturnalia, called *Sigillaria*, being the time when it was customary to make presents of these images. The market-place in Rome where they were sold was called by the same name.

Cages, money-boxes, even theatre-tickets, were made of pottery. These last are the prototypes of the modern, having on them the number of the row of benches and the seat to which the bearer was entitled. Pottery moulds have been found which were used by forgers to cast false coin. A hundred and thirty moulds were found in one lot in France, and at another



66. Roman Pottery. A Dwarf.



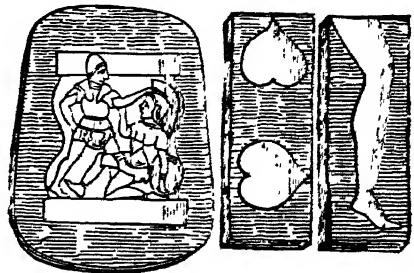
67. Bowl. Samian ware.

place moulds were found, with more than two thousand pieces of false silver coin. Moulds have also been found for making relief ornaments to be imposed on vases.

The two finest classes of pottery made by the Romans

are known as *Aretine ware*, from *Aretium*, where it was made; and *Samian ware*, from the Greek ware of *Samos*, which this resembles.

The *Aretine ware* was bright red, sometimes nearly as brilliant as red sealing-wax, unglazed, or more frequently covered with a thin but rich lustre. It was moulded with relief ornaments and figures. Pliny says this ware was used in his time, as well as the *Samian*, for table purposes. A few specimens are known in black. The objects are mostly small. The paste is somewhat softer and the lustre less strong than that of the *Samian ware*, which, however, so closely resembles it that it is not always possible to distinguish the two, especially as both were made at *Aretium*.



68. Roman Moulds for Pottery.

The red Roman ware called Samian is found in all parts of the world



69. Bowl. Samian ware.

to which the Roman legions went. It is similar to the Aretine, but stronger in body and lustre. It was used for all the domestic purposes to which we apply porcelain. It is remarkable that this ware, wherever found, appears to be of the same fabric as to clay and lustre, although it

was evidently made in various localities. Many objects in it present very fine decorations in relief. Potters' names abound on it, and inscriptions are known, such as *BIBE AMICI DE MEIO* ("Friend, drink from my cup"). At Paris cups of a late period were found, of curious shape, coarse red glaze, with inscriptions in relief, such as *OSPITA, REPLE LAGONA CERVESA*, which may be freely translated in the well-known line, "Come, landlord, fill the flowing bowl;" or, literally, "Landlord, fill up the jug with beer."

Among the most important and most beautiful works of the Romans in pottery are lamps. These abound in varied shapes, with ornaments in relief, in all the kinds of pottery described, as well as in red lustrous pottery like that of Cyprus. The designs on lamps are of great variety, and exhibit as a class the finest artistic work found in Roman pottery. The illustrations will give an idea of some of these. Potters' names are of frequent occurrence on them. The Metropolitan Museum of Art in New York possesses an admirable collection of several hundred Roman lamps, illustrating styles, shapes, and decorations.



70. Triton. (From a Roman lamp)

As the Roman Empire began to decay, the decadence of all the arts was marked. The pottery of the second, third, and fourth centuries of the Christian era is of small artistic importance. Lamps of these centuries which bear inscriptions or devices of Christian character are numerous and interesting. Some of these have been mentioned as found in Egypt. As there, so in other parts of the Roman dominions, lamps are found having various Christian emblems, crosses, the monogram of

Christ, the golden candlestick used in allusion to the seven churches, the fish, and inscriptions.

In the fourth century, and later, pottery was made in all parts of the empire, in black lustrous ware, of inferior workmanship, decorated with raised ornaments placed on the surface, hunting scenes, wreaths, animals, and sometimes with patterns in engraved lines. The common form is a mug, but vases are found. The larger part of the articles are small drinking-cups, and on these are found inscriptions in white, such as *IMPLE* ("Fill up"); *BIBE* ("Drink"); *BIBAMUS PIE* ("Let us drink piously"); *SITIO* ("I thirst"); *UT FELIX VIVAS* ("May you live happy"); *VINUM TIBI DULCIS* ("Wine for you, sweet one"); *AVE* ("Hail"); *AMO TE CONDITE* ("I love thee, cherished one").

In England and other parts of Europe distant from Rome are found great quantities of Roman pottery. The red Samian ware is found in England, but none seems to have been made



71. Cybele (From a Roman lamp)



72. Late Roman Vase. (Castor, England.)

there. The decadence of art is exhibited in the rude character of the Roman black pottery of the later periods. These articles are of various color, from black to gray; the glaze on some brilliant, on others dull; the sizes varying, mostly small cups, bottles, and vases. The ornamentation consists largely of small lumps of clay arranged in regular patterns. Some are decorated with pebbles embedded in the clay. Much of this ware is found in England, at and near Upchurch, and is sometimes called Upchurch ware. Another variety of black ware is found at Castor, in Northamptonshire, as well as in various places on the Continent, which is known as Castor ware.

The rapid survey which has been taken of the history of ancient pottery is but for the purpose of introducing the student to the more mod-

ern history. The literature of the ceramic art of the ancients is extensive. Many large works, devoted to illustrations of Greek vases,



73. Late Roman Vase. (Upchurch, England.)

have been published during the last and present century, edited by Passeri, Millin, Tischbein, D'Hancarville, Millingen, Laborde, Inghirami, Gerhard, the Duc de Luynes, and other eminent scholars. The American student, however, will find the most thorough and exhaustive work on the subject, which we have freely used in this sketch, "The History of Ancient Pottery," by Dr. Samuel Birch, one of the most accomplished of living antiquarians. The important discoveries made in Cyprus since the publication of the last edition of Dr.

Birch's work, adding greatly to our knowledge of early Greek art, serve to show the accuracy and scholarly care with which he has investigated



74. Romano-British Vases.

the subject, and summed up the results of former explorations, suggesting solutions of many doubtful questions which are fully confirmed by the Cypriote discoveries.

PART II.

MODERN POTTERY.

I.—SARACEN.

UNDER the name of Saracen potteries we propose to include all the fabrics, opaque and translucent, of the Asiatic races as well in Persia as in the countries which were overrun and conquered by the followers of Mohammed in the seventh and later centuries. The history of their work in pottery commences in Persia in the seventh century, and ends with a few modern factories in Anatolia and Northern Africa. The principal seats of manufacture west of Persia were at Damascus, Rhodes, in the Majorcan Islands, and Spain. But there were doubtless a great number of local factories, scattered here and there through the East. The prevalence of the use of enamelled tiles for interior and exterior architectural purposes indicates the existence of potteries in nearly every city of any magnitude under Mohammedan government.

The ceramic products of the Saracens include pottery and porcelain, and, for convenience, both are described under the present division. The Pottery is divided by its style of decoration into two great classes, the one decorated with metallic lustre, the other with colors. The colored decorations include wares painted and glazed, and wares covered with stanniferous enamel. All these kinds of pottery seem to have been made at the same time through a long period.

The Porcelain was made in Persia only, and is of both varieties—soft-paste and hard-paste.

It is possible and probable that the Arabians possessed some knowledge of decorative ceramic art before the days of Mohammed, but their art as known to us indicates so clearly its Persian origin that we may assume as evident their adoption of the styles found in Persia, and the subsequent growth, under their taste and influence, of peculiar styles which are properly called Saracen.

A varying extent of country has been, at different periods of history, under Persian power. Iran, the home of the Aryan or Iranian races, includes in general use Media and Persia proper, and the entire middle portion of Asia stretching to the east as far as the western borders of Chinese Tartary, and southward along the Persian Gulf to the range of mountains bounding the valley of the Indus. In the western portion of this territory a family of the race of man, lingering while the others went westward to the plain of Shinar, or returning from the Dispersion, possibly preserved the old manners, customs, and language of their antediluvian ancestors. From them went out colonies, who became progenitors of the vast hordes in India on the south, and in China on the east, in the colder regions of the north, and of those other hordes who, sweeping along to the westward, hardened by the climates in which they lived, have from time to time, in all ages since then, descended into the more southern regions, peopled from the other families, and, with rare exceptions, overcome and possessed them.

Retaining perhaps longer than any other of the great families of men the knowledge and worship of the one God, "the eternal Spirit inhabiting the universe," founder of heaven, earth, the sky, and all space, they in time divided this monotheistic belief into the idea of a dual God, or into two Gods—one good, the other evil—*Ormazd* and *Ahriman*; and afterward, by the common course, the visible acts of God were personified as deity, until the worship of fire became the chief characteristic of the religion. It is impossible to say when the order of the Magi, the priests of the fire-worshippers, arose. The date of Zoroaster (if he ever lived), the reformer of the religion, is unknown within many centuries.

The earlier history of the family may be conjectured as not unlike that of the tribes who formed the Hellenic confederation. Herodotus names four kings of Media, the last of whom was Astyages (594 B.C.), with whom our definite knowledge of history commences. Ctesias speaks of a King Arbaces, who destroyed Nineveh (about 876 B.C.); but this statement is not regarded as trustworthy. There were doubtless quarrels between the sparse families in earlier times, the strong conquering the weak. Separate governments, patriarchal and despotic, may have grown up; the tide of emigration and conquest sometimes flowed westward again, as well as eastward; varieties of language, having the same root, were used; and at the commencement of known history two great masses of families or tribes appear in the western portion of Central Asia, known now as Persians and Medes.

These two peoples, as they may be called, had common religion, language, and customs. The most valuable information concerning these is derived from the Hebrew writer Daniel. The Medes were the ruling race, but the Persians had a family of hereditary kings. In the reign of Astyages (594-558 B.C.) the Persians revolted under the lead of Cyrus, who became king of Media and Persia, conquered Babylon, and extended his conquests to the shores of the Archipelago. The history of the wars in which the powers of Iran were hurled against Greece and Egypt in the succeeding reigns need not be recapitulated. The Persians brought down on them at last the vengeance of the Greeks led by Alexander, who, when he covered the dead body of Darius with his cloak on the battle-field of Arbela (330 B.C.), spread also the pall over the kingdom of the Medes and Persians, and ended the westward progress by force of the Aryan races, language, and influence.

The Greeks did not penetrate Iran far to the eastward. The deserts of Khorassan were an effectual barrier, and the lands beyond remained practically unknown to them. These lands, stretching away to the almost mythical Serica, Sinæ, and the home of the Scythians beyond the Imaus, were peopled by various tribes, acknowledging probably the supremacy of the Median and Persian power. But under the successors of Alexander, 250 B.C., the Parthian Arsaces revolted against Antiochus and founded the Parthian kingdom, and at about the same time the Bactrian kingdom was established. The Seleucidan kings retained possession of Persia proper until 164 B.C., when the Parthians subjected the country, and possessed it for four hundred years. In 226 A.D., the Persians re-established their independence, and the reign of the Sassanidæ commenced. The magian fire-worship was again the religion of the kingdom, which continued till the Arabian invasion, when the followers of Mohammed, in the middle of the seventh century, poured in an irresistible flood over Western Asia, and established their religion with their power over the entire extent of ancient Iran. The last of the fire-worshippers—the Parsees—retired into India, and Mohammedanism penetrated that country and China.

The history of Iran has not been thus summarized without object. The study of ceramic art in connection with this history is to become of great interest. The country, the heart of Asia, is unexplored. Its art history is enveloped in darkness. Into this country the history of enamelled pottery leads from its origin in Egypt; here it was made by the Assyrians, until all record of the art is lost. Not quite all. The burial-mounds of Warka afford enough indications to show a series of painted

and glazed potteries from the Babylonian to and through the Sassanian period. The Hebrew bowls found by Mr. Layard, though doubted by some, may be links in the missing chain, rude pottery as they are. A glazed earthenware bottle, found by Mr. Layard at Babel, is perhaps of the Sassanian period. Further explorations in Persia will probably give clearer information on the now obscure history of the relationship between Assyrian enamelled pottery and the works of China on the East and of the Mohammedans on the West.

The line which on modern maps divides the Iranian from the Chinese territories was probably not defined until in comparatively recent times. Persia and China have been commercial neighbors from the beginnings of commerce among men. The Arabs traded with the Chinese by sea before the Crusades. Chinese vessels were abundant in the Persian Gulf at an early period. If the myrrhine vases of the Romans were, as some suppose, porcelain, we have Pliny's statement that these were made in Persia, and Propertius speaks of them as "baked in Parthian furnaces." Our entire knowledge of enamelled potteries tends to the idea as probable, in the absence of distinct evidence to the contrary, that the art of making them passed across Asia from Assyria. Where, then, was the next step in the art, that of making pottery itself translucent, first taken? No known fact forbids the theory that porcelain had been made in Persia before it was made in China. None of the earliest specimens remain in either country. Specimens of equal appearance of age are found in both.

There is, therefore, in Persia a field of investigation which will probably repay any amount of labor bestowed on it, since the ceramic history of the Iranian countries, from the sixth century before to the seventh century after Christ, is probably the history of the relations of China and India to Western art, and thus of the connections existing between families of the race now most widely separated in every way. Should it be found that enamelled bricks were continuously made in Persia from the Babylonian period to the Mohammedan conquest, the line of transmission of the art will be unbroken from the building of the Pyramids of Egypt to the last factory established in America.

When the Arabs invaded Persia in the seventh century they adopted Persian arts. Their history in this respect bears some analogy to that of the Greeks in what has been called their "colonization" of Lydian or Phenician countries. The conquerors learned new arts, evinced remarkable artistic powers, and transmitted these arts to their countrymen at home and to all the territories which they conquered. It does not appear whether the Persians were making glazed or enamelled pottery at the

time of the Arab invasion, but the natural theory is that the invaders found the old Babylonian art of enamelling brick still in use. The glazed coffins of the Sassanians were perhaps yet made when the Arabs came, and these were not likely to be the only style of glazed pottery of the Persian potters of that time. There is ground for a suggestion, too, that the Saracen style of architecture indicates that it was invented to be ornamented with tiles, rather than that the tiles were applied to a previously existing style.

The earliest specimens of Saracen ceramic art are these tiles, the successors of the enamelled bricks of the ancients. Before examining the special characteristics of other Saracen products, it is important to look at these tiles, which, in variety and beauty, deserve separate classification among their beautiful works. Wherever found, they are so much alike in fabric and intent that they are pre-eminently illustrative of that one wide-spread art which is purely Saracenic. Old mosques and tombs in Persia, and far to the east of modern Persia, abound in wall tiles of superb character. Count de Rochchouart has a blue glazed brick, found in the ruins of the ancient city of Kirman. Fragments of glazed tiles have been found in the ruins of Rhages, an ancient city of unknown date, mentioned in the story of Tobit. Mosques at Natinz, of the twelfth century, are built with tiles of the finest character. The Blue Mosque of Tabreez, near Oroomiah, of very ancient date, takes its name from its exterior covering of blue tiles.



75. Group of four Tiles from Cairo. Blue and green on white, each $8\frac{1}{2}$ by $8\frac{1}{2}$ inches. (T.-P. Coll.)

The Arabs carried the art swiftly back to Arabia, for the tiles on the tomb of Mohammed at Medina are supposed to date from 707 A.D., when that building was erected. These tiles are glazed, not stanniferous. The art spread with the Saracen power, and old mosques in all parts of the East illustrate it. Tiles are found on the mosques at Nice, in Anatolia (built about 1389), and at Iconium, in Asia Minor (built before 1275 A.D.). At Bokhara and Samarcand, in old Iran, are found wall tiles and pavements—how old is unknown. Mr. Vámbéry, who paid no attention to

ceramic art, speaks of "colored bricks" in numerous mosques of Samarcand, and, describing the ruins of the Medresse Hanym, built by the wife of Timour, says the remaining portion "has its pavement completely covered with mosaic made of earth, the composition and coloring of which are of incomparable beauty, and so firmly cemented that it occasioned me indescribable trouble to cut away the calyx of a flower, and even of this I could only remove, in a perfect state, the innermost part, with three leaves folded together."

In the masses of broken pottery which surround all old Eastern towns fragments of tiles of great beauty abound. On the hill-side of Mount Moriah, at Jerusalem, which is little else than a mass of broken marble, verd-antique, porphyry, and architectural remains in small pieces, we have gathered many fragments of early Saracen tiles of rich character.

The Kubbet-es-Sukrah (Dome of the Rock), at Jerusalem, commonly but erroneously called the Mosque of Omar, is an admirable example of this art. In its present condition it exhibits the workmanship of the six-

teenth century, when the building was restored by the Sultan Suleiman (1540-'50); but among the numerous tiles which adorn it, its porches, and attached buildings, are many much older than this date, and possibly as old as the foundation in the seventh century. We have in our collection several specimens of these which are evidently far apart in date of manufacture. The illustration (76) shows one of the exterior tiles, the pattern in dark blue, almost black, on ground originally white, but by age and exposure now become a rich buff or cream-color. We have tiles of the same pat-



76. Tile from Kubbet-es-Sukrah, Jerusalem. Blue on cream-white, 8 inches by 8. (T.-P. Coll.)

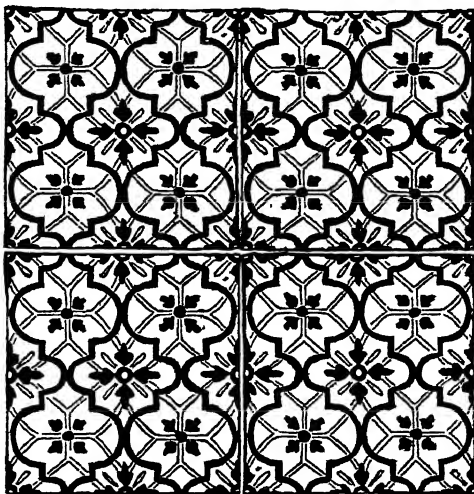
tern, in various sizes, from Damascus. Another tile from the Dome of the Rock is shown in illustration 83.

Throughout the Arab countries some of the more ancient houses of the wealthy have large rooms decorated from floor to ceiling with tiles in rich color, the patterns running from tile to tile, borders and bands following the curves and rectangles of the architecture, showing that the tiles were made specially for the rooms in which they were placed. A noble room thus decorated is in the ancient and vast house of Said Sadat, the present head of the family of Mohammed in Egypt, and several smaller rooms in the extensive buildings are similarly decorated. The Saracens had very great taste in the choice of decorations for special rooms. Noth-

ing can be finer in effect, more fairy-like, or more marvellous in beauty, than the interiors of rooms surrounded with these brilliant objects, where the light is only such as comes through the wonderfully constructed lattices of Arab work. These lattices were made to be seen from the interior, and no one who has only admired their beautiful patterns from the outside can appreciate the exquisite effect from within, where the wood is invisible, forming only black outlines around the lace-like openings through which the light pours. The wall tiles were often painted in the same patterns with the lattice-work, as in the one illustrated (77).

The designs found on the tiles afford good opportunity for the study of Saracen art, to which modern art owes a vast amount of its most valued patterns in architectural, mural, and glass decorations. The debt of Europe to the Saracens has never been sufficiently recognized.

Some of the spirit as well as the detail of this Saracen work may be traced to the Persians, from whom it was acquired. There are patterns in common use to the latest period which are undoubtedly Persian. The Mohammedans, like the Hebrews, did not represent the human form in paintings; but the Persians, who are followers of



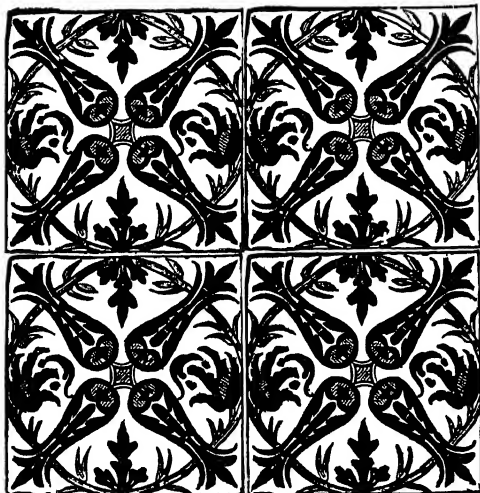
77. Group of four Tiles from Cairo: Lattice Pattern. Blue and green on pale-green ground, each $8\frac{1}{2}$ by $8\frac{1}{2}$ inches. (T.-P. Coll.)

Ali, had no such rule. Hence, in decorations strictly Persian, portraits and representations of men on horseback are common. But the Arabian mind was not content with the old Persian ideas, and the great wealth of Saracen decorative patterns belongs to that mind. There is a mystery attending the rise, growth, and decay of Arabian art. Why in the seventeenth century did the Arabs suddenly lose all taste and power of execution, when up to that period they had been in advance of the whole world—the teachers of Europe?

There is a luxuriance in Saracen decorations not equalled in any later period. The Trumbull-Prime collection contains more than two hundred specimens of Saracen wall tiles, and no one of them fails to charm the eye

of the uneducated by the disposition of color, and of the educated by the peculiar artistic skill exhibited in the arrangement and designs.

Nature afforded ample subjects for the Saracen artists. The growth of plants, the intricate windings of the stems of vines, the blossoms of favorite flowers, were abundantly illustrated; and although these were not always nor often symbolic, they established themselves so thoroughly in the tastes of the people that they were repeated without change from century to century, in close imitation of nature, or in conventional forms which grew into use. The rose, which was a special Persian decoration, is found on old tiles in a close, heavy, stiff rosette. The tulip in bud and in opening flower is well represented, and conventionalized into a form sometimes difficult to recognize, as on tiles illustrated (78, 82). The hyacinth is never to be mistaken. The white jessamine blossom appears often on blue grounds. The carnation is a favorite flower, represented in good drawing, and in a conventional form (Ill. 79) not difficult to recognize.



78. Group of two Tiles from Damascus, and two from Cairo. Blue and green on white. Each $8\frac{1}{4}$ by $8\frac{1}{4}$ inches. (T.-P. Coll.)

On tiles from Damascus in our collection, of the sixteenth or seventeenth century, grapevines and clusters of grapes are represented, the vines running from tile to tile, and the clusters of fruit hanging in dark-blue on lighter blue grounds, or in purple on blue. Arabesque patterns are found in great variety, chiefly composed of stems and tendrils of vines, with leaves. These sometimes pass over many tiles, and are sometimes complete patterns on one tile, but so arranged that some lines connect with the same pattern on the adjoining tiles in the wall,

or a corner device will become complete when four corners meet. The cypress-tree was frequently represented. In the Egyptian department of the Philadelphia Exhibition, in 1876, a group of nine tiles was shown as coming from Cairo. In our collection is a precisely similar group, which we obtained in Damascus. The design consists of architectural forms, cypress-trees, and Mohammedan inscriptions, forming with nine tiles a single pattern. We have other tiles, also from Damascus, on each of

which stands, in the middle, a single cypress-tree, and at each side half of another, made complete by the joining of the next tile. The effect of a wall covered with these sombre trees, in deep green, with black lines indicating branches, must have been funereal. They were probably made for a tomb.

On Persian tiles, from an early period, a decoration in metallic lustre was used, which was brilliant and effective, and was the parent of the wonderful products of Gubbio. This metallic lustre, appearing on the tiles at Natinz, and other early specimens, continued in use down to the period of Shah Abbas (1582-1629 A.D.), which, indeed, is near the end of Saracen decorated pottery. This lustre was an art known only to the Saracens until learned from them by Maestro Giorgio, of Gubbio, in the sixteenth century, or by his teacher. We have found fragments of lusted Saracen wares in the mounds of broken pottery around Cairo, indicating the practice of the art there at an early date. It, however, never reached among the Saracens the splendor to which it was brought at Gubbio. The origin of this art is unknown. Did it perhaps spring from a desire to imitate in tiles the golden effects of the Byzantine mosaics?

The ground colors of tiles vary, the most common being white and blue. Some old Persian tiles in our collection have a very soft creamy-gray ground, producing a charming effect. A rare old color is an intense green ground, on which arabesque patterns are placed in brilliant black. The designs are painted in blue of several shades, from the deepest to the lightest turquoise, green of the same variety, purple, yellow, mauve, brown, red, and black. Our notions about harmony of colors, which are arbitrary and generally incorrect, never trammelled Saracen artists. Flowers and arabesque patterns are usually outlined in black or blue, and filled in with color. We have some specimens in which various colors are used in such delicate taste in small arabesques and rosettes as to give, at a little distance, an almost opalescent effect.



79. Tile from Damascus. Blue, green, and purple on white ground. $7\frac{1}{2}$ by $7\frac{1}{2}$ inches. (T.-P. Coll.)

The artistic ability of the Saracens consisted chiefly in their admirable use and disposition of colors; but occasionally on tiles found at Damascus there is evidence of great freedom and boldness of execution worthy any artist. A tile, $10\frac{1}{2}$ by 8 inches, belonging to Mr. Charles

Dudley Warner, at Hartford, brought by him from Damascus, is one of a series, of which the decoration must have been exceedingly beautiful and artistic. The ground is intense dark blue, and over it spring the stems of the three favorite flowers—the tulip, hyacinth, and carnation—with slender leaves, and here and there a blossom, all in pure white, except a touch of green on the bud of a carnation. These white stems and leaves and flowers were first outlined with black on the white enamel, and then the ground was filled in with the blue, covering the black lines. The whole group must have presented on the wall which it covered an appearance hardly to be surpassed in natural effect, not to be surpassed in grace and beauty.



80. Tile from Damascus. White on dark-blue ground. 8 by 10½ inches. (Collection of C. D. Warner, Esq.)

Another enamelled tile which Mr. Warner obtained in Damascus is in several respects unusual, and possibly of Persian fabric. The ground is marbled with white, having a green tint, dark blue, black, and touches of green. A large Persian lion is well drawn, and colored green—the outlines, mane, and other details in black. On his back rests the sun—the outline, eyes, and nose in black, the mouth green. The tone of the whole work is unlike any Damascus ware in our collection, or which we have seen in that city or elsewhere.



81 Tile from Damascus. 9½ by 9½ inches. (Collection of C. D. Warner, Esq.)

Two classes of pottery seem to have been used for these wall tiles, one softer than the other, and less compact. Two varieties of covering are found—one a pure glass glaze laid over the painted surface, the other stanniferous enamel. The glass glaze is strong and thick, but perfectly transparent. On fragments it can be lifted off in small pieces, and the paint underneath is then easily scraped away, leaving the pottery exposed. These tiles were first baked, then covered with a thick surface of pure white clay, or prepared slip, on which the designs were painted. The whole was then glazed and baked. The

blue, green, and purple colors seem to have combined in part with the glaze, the red sometimes uniting to the glaze, but oftener remaining free in powder. The white remains free under the glaze and under the other colors, and can always be scraped off in a sandy powder.

The tiles with stanniferous enamel are generally of a purer white than those which are glazed, from the fact that the glaze has often a slight greenish tint, like pale-green glass, which is not noticed until compared with a pure white.

We have not found any tiles decorated with the brilliant red which characterizes Rhodian dishes, except on the shores of, or near to, the Mediterranean. All that we have seen thus decorated closely resemble the fabric of those dishes. Our experience, however, is far from being conclusive.

Damascus furnishes a great variety of the most beautiful specimens, the wealth and splendor of that city from the times of Saladin commanding the best work of the Saracen artists. In Cairo and the tombs around that city many fine specimens remain. All along the track of the Arabian civilization in Northern Africa they mark the advance of Islam; and Spain, from the time of the Moorish conquest, abounded in buildings which were decorated with them.

In Constantinople the Mosque of Suleiman contains many, and the tomb of Mustapha, his son, built in 1544, is one of the finest remaining specimens of their use in architecture.

These beautiful works of art sometimes descend to base uses. Some very fine specimens in our collection we found in a Cairene cook-shop, where they were built into a modern wall around the furnaces, the rich blue and green decorations effectually concealed by the spattering of grease and dirt, which had become almost as firm as the enamel under them.

The sizes vary according to the requirements of the walls for which they are made. Among the smallest and thinnest in our collection are some from the cloisters or porches of the Dome of the Rock in Jerusalem, being about six inches square and three-eighths of an inch thick.

The Spaniards gave to the tiles the name *azulejo*, supposed to be from



82. Tile from Damascus, made for a corner. Blue, green, and white. 11 by 8½ inches. (T.-P. Coll.)

an Arabic word meaning "painted tile," but probably originally due to the prevalent blue color on them, which in Arabic is *azr*, and in Spanish *azul*. The mosque at Cordova, built in the eighth century, was covered with them. The Alhambra was paved and its walls partly decorated with them. The Cuarto Real, in Granada, is ornamented with white tiles, on which are patterns in gold lustre, the designs being arabesques of leaves, vines, and tendrils, a favorite pattern in the East. Mr. Ford ("Hand-book for Spain"), who has collected and examined a large variety of *azulejos*, thinks many of the Moorish tiles with blue enamel and details in gold lustre as old as 1300 A.D.; and that the old and fine work was copied in inferior style at a later date. The fact that the same patterns were favorites for many centuries, and that the Saracens were good potters at all times, renders it difficult to determine the comparative age of specimens. The Spaniards learned the art from the Saracens, and continued to practise it, making reproductions of the ancient patterns, and introducing devices of their own, down to modern times. The Saracen work in the East ceased in the early part of the seventeenth century.

These tiles were probably made in the various places where they are found. The same patterns were used in different potteries. Lustrated tiles are found only in Persia and in Spain. We have specimens of painted tiles from Damascus and from Cairo which are identical in size, pattern, and appearance (Ill. 78), and it is not probable that these were carried from one place to the other. It is questionable whether the tiles of the Kubbet in Jerusalem were made there. The variety is considerable, and some specimens are of a peculiar make, the pottery more strong and compact, the tile less than a half-inch in thickness, the enamel and blue and green colors excessively brilliant. The thinness and great beauty of these recall the description of the light tiles made at Rhodes for the Church



83. Half of a Tile from Kubbet-es-Sukrah, Jerusalem. Dark blue on white. 6 inches by 6. (T.-P. Coll.)

of St. Sophia, in the days of Justinian. The tile from the Kubbet, of which we illustrate half (83), is decorated in an intense blue, is only six inches square, very thin, and of a class which we have found very rare, and appearing very ancient.

The history of Saracen pottery has been thus far considered with special reference to wall tiles, because in that respect the art was one from the first. We now return to Persia for an examination of other ceramic works.

The Saracens in Persia made vases, cups, bowls, water and wine bottles, dishes and other objects in soft pottery, which were sometimes painted and glazed, sometimes covered with stanniferous enamel. This Persian faience is of great variety and beauty.

Besides these wares in soft pottery, other wares were made in Persia which have given rise to much discussion, and it is not likely that the questions will be definitely settled until we have more information on the history of art in that country prior to the eighteenth century. If we are to accept the modern definition of porcelain as translucent pottery, of whatever materials made, all authorities agree that porcelain was made in Persia; for all class translucent potteries among Persian fabrics. But numerous articles of true hard-paste porcelain are found in Persia, many without mark, many with Chinese marks and Chinese dates, some with Persian inscriptions, and of these it is by some eminent authorities supposed that the larger quantity are Persian fabrics, while other equally eminent scholars believe them to be all Chinese, made for the Persian market. The conflicting views of these gentlemen are important for the student's examination.

Major Murdock Smith, director of the Persian telegraph department, made extensive collections of Persian art in that country for the South Kensington Museum, and at the request of the Lords of the Committee of Council on Education prepared a brief dissertation on Persian art. We cannot better serve the American student than by quoting this gentleman's clear account of the pottery and porcelain found in Persia:*

Before the discovery of the passage to the east round the Cape of Good Hope, the trade from India and China passed either overland through Central Asia, or by way of the Persian Gulf, to Europe, Persia thereby becoming a central point in the transit. In the time of Shah Abbas (about 1600 A.D.) this trade route was still much frequented. It is therefore to be presumed that the Chinese porcelains found in Persia are of that period, if not of earlier date. The Persians gave them different names, such as china of the Khalifs, china of Shah Abbas, etc. Any pieces that may have come to Persia in later times are of a totally different style. With the exception of a few of these modern articles, none of the Chinese porcelains from Persia in the [South Kensington] museum collection can be of later date than the reign of Shah Abbas, and many of them are probably still older. Of their authenticity there cannot be the slightest doubt.

Regarding the earthenware of Persia, Chardin (to whom we are indebted for

* "Persian Art," by Major R. Murdock Smith, R.E. Published for the Committee, etc.: London, Chapman & Hall.

so many minute and accurate details about Persia as it was in the time of our own Queen Elizabeth), writing in the beginning of the seventeenth century, says: "La vaisselle d'émail, ou de faïence, comme nous l'appelons, est pareillement une de leurs plus belles manufactures; on en fait dans toute la Perse. La plus belle se fait à Shiraz, à Meshed, à Yezd et à Kerman, et particulièrement dans un bourg de Caramanie nommé Zoronde. La terre de cette faïence est d'émail pur, tout en dedans comme en dehors, comme la porcelaine de Chine; elle a le grain tout aussi fin et est aussi transparente, ce qui fait que souvent on est si fort trompé à cette porcelaine qu'on ne saurait discerner celle de la Chine d'avec celle de la Perse. Vous trouverez même quelquefois de cette porcelaine de Perse qui passe celle de la Chine tant le vernis en est beau et vif."

There is nothing in this passage to show positively that true porcelain was ever made in Persia; that is to say, porcelain of hard paste like that of China. Chardin appears to use the names *faïence* and *porcelaine* indiscriminately, or perhaps to speak of Persian faïence as Persian porcelain, just as we speak of Dresden china, English china, etc., which are of course only imitations of real Chinese porcelain. As regards the paste, Chinese porcelain is undoubtedly better imitated in Europe than in Persia. Long before the Europeans, however, the Persians made such beautiful earthenwares that they might well be mistaken for Chinese porcelain—at all events, as regarded design, color, varnish, and form. For instance, a vase bears an inscription said to be Pehlevi. If this is the case, the vase must be more than five hundred years old. But if Chardin had examined them more minutely, he could not have failed to observe an essential difference in the clay or paste, which is unlike the kaolin, inasmuch as it is always more or less light and porous.

Persian earthenwares are of various kinds, although Chardin does not appear to have distinguished them. He speaks of a "transparent porcelain," as if the term were generally applicable to Persian earthenware, of which in reality the transparent is only one kind.

There is another question to be examined regarding the manufacture of earthenware in Persia. Besides the fact that numerous articles of Persian earthenware are not only imitations, but actual copies, of pieces of Chinese porcelain, many of them bear makers' marks in Chinese characters. It is all but impossible that they could have been made in China, the material being so essentially different from the kaolin of that country. Either the marks were made by Chinese potters who had been brought to work in Persia, or they were made by Persian workmen in imitation of the marks on true Chinese porcelain. The question may possibly be solved by Chinese scholars, as it is improbable that Chinese characters could be so well imitated by strangers as to deceive an expert. Should the marks prove to be really Chinese, and not forgeries, an explanation of their existence on articles made in Persia is not difficult to find. An intelligent and powerful Persian sovereign like Shah Abbas, seeing the lucrative trade in porcelain which was carried on with China, may well have conceived the idea of manufacturing it in his own

country, and with that object have brought a number of Chinese workmen to Persia, just as our own government has acted for the cultivation of the tea-plant in India; or Chinese potters may have come to Persia at some other time on their own account. For instance, Sir John Malcolm, in his "History of Persia" (vol. i., p. 422), says that a hundred families of Chinese artisans and engineers came to Persia with Hulaku Khan about 1256 A.D. However that may be, if Chinese potters were ever actually employed in Persia, they would naturally imitate as far as possible, and in so doing teach their Persian fellow-workmen to copy the true porcelain of their own country. Should the Chinese marks, however, turn out to be forgeries, the resemblance of the Persian earthenware to Chinese porcelain is sufficiently accounted for by the abundance in Persia of Chinese models, which were skilfully imitated by native workmen. In either case it will be interesting to compare the two collections in the museum, namely, the Chinese porcelain found in Persia, and the earthenware of Persian manufacture. A large yellow bowl in the one has almost its exact counterpart in the other.

One fact appears certain, that the art of pottery gradually degenerated in Persia after the time of Shah Abbas, since whose reign nothing of much value has been produced. The earthenware of the present day, as regards both workmanship and material, is of the commonest description.

The *faïence à reflet* (or, with metallic lustre) excepted, the ancient Persian earthenware may be classified as follows:

The finest, which is also that most closely resembling the Chinese. This is usually of a white ground, with designs in azure-blue; the paste is very hard; the designs are bold and the lines freely drawn; and the color is not blended with the glaze, which is generally pure and brilliant. Examples of this class are usually thinner than of the others, and many bear Chinese marks. Some, although only a few, have designs in relief. In the catalogue they are generally designated as *Faïence fine*. This kind appears to be the one that has survived the longest in Persia, the earthenware of the present day being a degenerated form of it. The gradual decline may be followed in the specimens in the museum, the excellence of which are nearly in proportion to their age. In the objects of recent date the varnish or glaze is more vitrified, less even, and easily dissolved, the colors are blended in the varnish, and the designs are badly executed.

The second kind imitates less closely the Chinese designs; the objects are thicker; the paste is softer and more porous; the blue is brighter; the glaze is not so good, and is less even; and the designs are not so well drawn. A few of them have Chinese marks. Of this thicker kind of earthenware there are, nevertheless, some specimens of fine workmanship, with sharp-lined designs of various colors; such as red, lapis-lazuli, blue, etc. Many of them have designs in relief, or in *gouffrures*, or channelling. Besides the colors of the designs, some of them are varnished on the outside with a single color, generally bronze or lapis-lazuli blue.

The third class is of a harder and denser paste than the others; the designs are

of a blackish color on a white ground, but not so well executed as in the first and second kinds; the varnish is whiter, and appears to be harder. This kind seems to have some affinity to the stanniferous earthenware said to have been invented by the Arabs in the beginning of the fourteenth century, as, like it, the paste is more or less dark in color, and the glaze thick and white. Some of the objects of this description are varnished outside with a single color which, when a lapis-lazuli blue, is remarkably bright. If the design includes figures, it will be remarked that the faces are left blank. This earthenware was therefore probably made by Mussulmans of the Sunni sect, whose tenets regarding graven and painted images are much more rigid than those of the Shi'ahs. Very few large objects are to be found of this kind, and there are apparently none with designs in relief or with *gouffrures*. In general, they are less artistic than those of the first or second class. Occasionally they bear a mark somewhat like Chinese. In the catalogue they are designated *Faïence dure*.

The fourth kind is a translucent white earthenware, somewhat resembling the transparent porcelain of China. It is generally thin; many of the articles have *gouffrures*, and some of them are varnished with a single color outside, in which case they are a little thicker than the others. The paste appears to be harder than that of the other kinds. The examples, which are all small, have no makers' marks. This kind of earthenware, called in the catalogue *Faïence translucide*, or *Porcelaine blanche de Perse*, is rather rare.

The fifth kind is also translucent, but very thin, and has generally lace-like designs *à jour*. It is perhaps more of a porcelain than a true earthenware. Probably one of these last kinds was meant by Chardin when he wrote of the porcelain of Karamania as being transparent and resembling that of China. Pliny also mentions a substance found in Karamania of which murrhine vases were made. These, however, were remarkable for their various lustres, or *reflets*, of which the kind we are describing is devoid. It is now extremely rare.

The sixth kind comprises all the common pottery made of reddish clay, and varnished with a single color. The paste is sometimes uncommonly hard. The most remarkable division of objects of this class are large dishes and other vessels of great thickness and weight, many of which are imitations of the *céladon* porcelain of China. The varnish, especially the greens and bronzes, is often very fine. Some of the pieces have designs in *gouffrures* or in relief. Being of a commoner description, this kind is probably of older origin than most of the others. In fact, fragments of it mixed with bits of common unvarnished pottery are found among almost all the ruins of Persia. Such fragments of unglazed pottery are mostly of the rudest and coarsest description, and evidently date from the infancy of the art. In the ruins of Rhages many small pear-shaped pots of this kind are found, the paste of which is extremely hard, like that of English ginger-beer bottles. Similar pots to those found at Rhages have been discovered in Egypt and other countries. From their general resemblance in form to pine-cones they have been called *thyrses*, and are supposed to have been used for holding mercury. In the ruins of Rhages

(a city whose origin is unknown, but of which mention is made in the book of Tobias, and which was undoubtedly one of the principal cities of Persia long before the Christian era) very few have been found unbroken. They generally have rudely executed figures or written characters in relief. The Persians have no tradition as to what purpose they served. There is no doubt, however, that they were made at Rhages itself, as pieces spoiled in the baking have been found in places which bear all the marks of having once been potters' kilns. There are one or two of these vases in the museum collection as well as some fragments of the same ware from the ruins of Rhages.

The first and second kinds (of the above classification) before arriving at the state of perfection which they ultimately attained, and also the sixth with its different sorts of common pottery, must be of very ancient date. Possibly the different kinds were produced in different parts of the country, although there are at present no records to prove that such was the case.

In addition to the above distinctions, there remains to be noticed the most remarkable of all, namely, the earthenware *à reflet métallique*, or with metallic lustre. The paste or clay seems the same as that of the first and second kinds, but the covering is altogether *sui generis*. It would seem to have been employed for articles of luxury only, having apparently at no time been abundant, and being now very rare. Unbroken examples are now hardly ever to be seen. Fragments, as has already been mentioned, have been found among the ruins of Rhages. This city was several times destroyed by earthquakes and by conquerors; the last time by Hulaku Khan (son of Genghis Khan), about 1250 A.D. The débris now found among the ruins must therefore, at the very latest, be of that date. After each destruction, however, the city appears to have been rebuilt; not exactly on the site of the preceding, but generally within it and on a smaller scale. Some of the enceintes can still be partially traced. Outside the later enceintes there are mounds of the débris of the older ruins. The contents of these mounds must therefore belong to the period of destructions previous to that by Hulaku Khan; possibly several centuries before the Christian era. It is in those mounds that fragments of the earthenware *à reflet* have mostly been found, thereby giving a latitude of from six hundred to upward of two thousand years for the age to be assigned to them.

It does not of course follow that all the articles of this kind belong to one period. Their manufacture continued, in fact, as late as the time of Shah Abbas, 1582 A.D., in whose reign tiles with metallic lustre were still made. Are they possibly a kind of the murrhine vases so esteemed by the Romans, which are mentioned by Pliny (as before remarked) as made of a substance found in Karamania (Kerman), and said to have been chiefly remarkable for their peculiar reflets, or lustres, of different colors?

Of this earthenware *à reflet* two kinds are found in Persia; one, yellow on a white ground; the other, lapis-lazuli blue. Of the former there are several varieties; the yellow being more or less dark, and giving different reflets. The latter (which is the rarer of the two) is of one style only.

The wall tiles à *reflet métallique* are evidently an imitation of this kind of earthenware.

There is a remarkable absence in Persian earthenware of articles meant solely or chiefly for show. Everything was made for ordinary use—such as dishes, bowls, plates, water-bottles, etc. This, however, only shows how generally diffused were artistic taste and good workmanship in the country. The same remark applies equally to almost all other classes of manufacture.

The chief seat of earthenware manufacture was Kashan and the neighborhood, including Nain, where good clay is still found. Cobalt, the color chiefly used, is also found at Kashan and Koom. The common name for Persian earthenware is still “Kashi Kari,” or Kashan work.

At Koom a very porous clay is found, of which the inhabitants make unglazed water-cooling bottles and drinking vessels, which are sent to the surrounding parts of Persia. Even of such common utensils many are elegant in form, and ornamented with clever designs impressed in the clay, or with specks of color in imitation of turquoises.

Mr. Fortnum (in the South Kensington Catalogue) classifies Persian glazed pottery as follows:

- A. Wares generally highly baked and sometimes semi-translucent. Paste fine and rather thin, decorated with ruby, brown, and coppery lustre on dark-blue and creamy-white ground. Examples in collections probably date from the middle of the sixteenth to the middle of the seventeenth century, but lusted tiles exist of much earlier time.
- B. Wares of fine paste, highly baked, semi-translucent, of creamy color and rich clear glaze, running into tears beneath the piece of a pale sea-green tint; characteristic decoration holes pierced through the paste and filled in with the transparent glaze; the raised centres, etc., are bordered with a chocolate-brown or blue leafage slightly raised. This is supposed to be the Gombrown ware.
- C. Wares frequently of fine paste and highly baked to semi-transparency. The ground white; decoration of plants and animals, sometimes after the Chinese, in bright cobalt-blue, the outlines frequently drawn in manganese, some pieces with reliefs; imitation Chinese marks also occur. This variety is perhaps more recent than the others.

M. Jacquemart, who has devoted great attention to this, as to all other departments of ceramic art, in his “*Histoire de la Céramique*,” makes the following classification of Persian wares:

1. La porcelaine émail que nous croyons la plus ancienne.
2. La porcelaine tendre, ou poterie siliceuse translucide.
3. La faïence.
4. La porcelaine dure.

The expressions “translucid,” “semi-translucent,” applied to pottery, at once direct attention to the fact that the modern distinction between pottery and porcelain is not satisfactory. It is beyond question that pot-

tery sometimes becomes translucent when subjected to great heat. The nomenclature of the several wares of Persia, however, is of small moment. The important question is whether Persia has produced true hard-paste porcelain. This question is important for several reasons; not only as an interesting point in the history of art, but as bearing on the question of the original invention of porcelain, and also on the transmission of that art to Europe. It will be seen hereafter that the first porcelain made in Europe was produced at Venice in the early part of the sixteenth century; and the next successful manufacture, and the earliest of which we have any attested specimens, was at Florence towards the close of that century. The Florentine specimens show clearly the knowledge and imitation of the Oriental art; but it is open to question whether the imitation is of the Chinese, Japanese, or Saracen. Italy had, but a short time before the Venice porcelain was made, accepted styles of pottery and the great art of stanniferous enamel from the Saracens. Did Italy also learn from them the art of making porcelain?

And perhaps a more interesting question, to which allusion has been made, is involved in what may be hereafter learned on this subject. Mesopotamia had derived from Egypt, and probably transmitted to Eastern Asia, the art of enamelling pottery. The Chinese authorities indicate that porcelain was first made in China not earlier than 175 B.C. But there is no authority for attributing the invention to the Chinese. If hard-paste porcelain was one of the arts of Persia four centuries ago, it may well be that it was a Persian art many centuries earlier, a direct descendant of the Egyptian art of enamelling, which was received by the Persians from Nineveh or Babylon in the days of Cyrus. Is it not quite as possible, theorizing from our present knowledge, or rather our ignorance, of the subject, that China learned the art of making porcelain from Persia as that Persia learned it from China?

M. Jacquemart has made an enthusiastic examination and description of the hard-paste porcelains which he believes to be of Persian manufacture. As he is the only writer who has attempted this, and is recognized as among the highest authorities, we condense his account, referring the student for fuller details to the "*Histoire de la Céramique*."

He divides the hard-paste porcelains of Persia into the same classes in which some writers place the porcelains of China: 1. Those decorated in blue under the glaze; 2. Those decorated in polychrome. Under the second class are the subdivisions which the French authorities adopt (but which appear to us wholly unsatisfactory) of the families *Chrysanthemopæonienne*, *Green*, and *Rose*. His descriptions (abbreviated) follow:

The porcelain decorated in blue under the glaze, the most common kind, has often a coarse paste, carelessly worked, having warps, checks, sandy or metallic specks, and disunion of parts united by slip. The enamel, blue in tint, vitreous, is not always perfectly spread; but the striking characteristic is the mode of baking. In China every piece is placed on a support or circular plate, of the same paste of which seggars are made, which holds the foot in form, and leaves a slight indented circle, to which afterward are adjusted the wooden or metal mountings. The Persians content themselves with placing the vases on a coarse sand, of which the grains adhere to the soft paste and penetrate it deeply. When taken from the oven, one finds, in consequence, many quartzose pebbles; or, if the piece is specially worked, it is seen that its base has been polished on the wheel, and thus some grains have sprung out, leaving their empty cavities, and others worn, variously colored, form a sort of pudding-stone with the porcelain.

A specimen is in the ordinary form of the water-bottle, a bulb with high neck. On it are four medallions in which are inserted, in Persian, the lines of a four-verse stanza, in which the poet invites a drinker to use the forbidden liquor, and to forget in drunkenness the cares of this vale of tears. "Drink wine," he says. "Friends, do not separate without pain. Give me the surahai." The inscription is interesting as containing the Persian name of the vase.*

Two similar surahais have the same stanza, not on borders, but in medallions on the bulb. Many others, without legend, pass unseen in commerce, confounded among the quantities of common Oriental porcelains with which the Dutch flood the market.

Another piece is a large cup or plate without the flat border, of which the outer circumference is engraved under the glaze with sea-waves; the porcelain has been turned yellow by smoke in the furnace, and the cobalt-blue has come out with a black tint. On the inside are a long Persian legend, and many conventionalized Persian characters. On the bottom is a legend in Chinese dating it Siouen-ti period, Ming Dynasty (1426-1435). This is one of the dates most frequently found on Persian porcelain. After Siouen-ti, the most frequent date is Kia-thsing, then Wan-li. The Iran porcelains are also frequently marked underneath with Chinese symbols, such as the leaf, the jade tablet, the pearl, etc.

We will not stop to describe the numerous and often gigantic plates, the vases for the ablutions, the biberons, the narghile receivers, where the blue painting is combined with reliefs in the paste.

Of the pieces "dipped in blue," some are large ewers without handles, having spouts like an S, the top opening in a crescent form; others are covered coffee-pots, and small pots with handles, like our cream-pots. The blue is very fluid, but wants

* This form of water-bottle, apparently derived from the gourd, is still common to many peoples of Asia, Africa, Europe, and America. It is the Hindostanee *srai*, the Mahratta *khoojah*, the Egyptian *ghooleh*; is found in Phœnician and Greek ancient pottery, in the modern wares of many countries, and is the prototype of the modern wine-bottle.

purity; it would seem to have been applied like a *céladon*, on a paste slightly blackened. The porcelains of Iran go back to an ancient date, certainly beyond the fifteenth century, since in 1426 they were in all their perfection. As to the origin of the blue vases, we can attribute it to Khorasan. Professor Choizko, long resident in Persia, recognized these vases as the same called by the inhabitants porcelain of Mesched. We attribute to the same origin pieces decorated in blue with glaze lightly tinted in the Nankin yellow.

Of the *Chrysanthemo-Pæonian* family, most pieces are decorated only in iron-red and gold. Among the most important are ewers for ablutions. One in the cabinet of M. Séchan (Ill. 84) has a neck, encircled by a ring channelled with a double row of fluting. On each side of the bulb a palm stands out in half-relief, with a red ground in which are arabesques left uncolored. From under the palm, branches diverge into flowers, of which the principal flower is a lily. These flowers, with the leaves of a water-plant, scrolls, etc., in red or gold outlined with red, form all the decoration. A kind of bottle with fluted bodies, quite large necks, a little open at top, and biberons, show the same style of ornaments, with slender stems and grasses in gold not outlined.

Specimens of the Green family are many. The enamels equal the Chinese. The decorations are distinctively Persian. Pieces have large scrolls cut out, resembling the Greek *acanthus*. An ornamental tulip is common. The symbolic palm is frequent, surrounded by a serrated border, filled with bouquets resembling the embroidery on Cashmere shawls. Some pieces have only the palms arranged symmetrically.

Another class, imitating Chinese work, includes plates, jars, bottles, etc., decorated with peonies, the *fong hoang* (of China), and other fantastic animals, surrounded by rich vegetation. In these the ground is covered with a mosaic, a lozenge pattern, or with broken lines, in iron-red.

Another class has Chinese figures, more elongated than Chinese work; the fat men are obese; marked faces are exaggerated to grimaces.

The green decoration of Persia is often associated with various colored grounds. The *bleu-fouettée* heightened with gold covers the outside of bowls, with palms and bouquets on the inside, and the palms and bouquets on the outside are on a fine Nankin or brown dead-leaf glaze.



84. Persian Porcelain Water-pot. (Séchan Coll.)

Pieces of the Rose family are the least numerous, and probably the latest. Large, stiff stalks issue from a kind of round pot, terminating in a wide, open cruciform flower. Serrated leaves are in scrolls. All these are in bright tints. We have seen enamels of this family on square tea-canisters with cylindric spouts, on a fine ewer, and on gigantic jars, ornamented with the figure of the simorg. The beauty and delicacy of these show to what richness the decoration of Persian palaces must have arrived.

The Chinese white was imitated in Persia. A double cup having the exterior of open-work scrolls of flowers has been engraved, and covered again with a creamy-white glaze. A cylindrical candlestick, ribbed, with broad base, has for sole decoration crossed ogives, traced with the point, and surmounted by impressed dots.

Céladons are frequent, with the Chinese sea-green tint, only to be recognized by their style. Some are simply gadrooned or fluted, others have ornaments in relief.

Another variety consists of pieces "dipped in color," invariably decorated in white *engobe*. The most of these are bottles, or surahais, for wine; others with conical bodies and a swelling towards the top of the neck, and also biberons, tea-pots with handles either high or in elliptic arcs. On grounds of beautiful brown are arabesque borders with pearl pendants; bouquets of chrysanthemums rising from spheroidal pots spread on both sides of the piece, and are accompanied by a kind of cactus trunk, with alternating prickly-pear leaves. This is done largely with a white paste, applied with a single stroke, and where the strokes cross the white is purer and more *mat*. The result is almost a modelling which gives reality to the flowers. The leaves, conical with three denticulations at top, take that peculiar character of form which is less characteristic of a particular species than of the Persian style in general, since we find the same form in the white open-work and also in the paintings of the Green family.

M. Jacquemart, whose view of the hard-paste porcelains of Persia we have thus far condensed, refers to a rare green porcelain, mentioned in "The Thousand and One Nights" by the name *martabani*, and supposes it the same referred to by Chardin, who describes a green porcelain, known in Persia in his time, so valued that a dish cost five hundred crowns, and adds that its price comes from the beauty and fineness of the material, which render it transparent although of a thickness greater than that of two crowns. M. Jacquemart, however, decides to assign this rare porcelain to Siam, one of whose ancient states was Martaban.

The variations of opinion among the experts may well lead the student to regard the question of the existence of a Persian fabric of true porcelain as left in a maze. All the writers, however, agree in assigning "translucent potteries" to Persia, and translucent pottery is porcelain.

But we have no doubt of the fact that true hard-paste porcelain has long been made in Persia, of a quality equal to the best wares of China. No other theory is consistent with numerous specimens in our own and other collections.

While the enthusiasm of M. Jacquemart may possibly have led him to extend the scope of the Persian hard-paste porcelain in some directions, it is quite possible that he has not included all the varieties of the fabric which must be assigned to that country.

M. Chardin states that in his time it was said the Dutch mixed the Persian porcelains with the Chinese which they sent to Europe. The early trade of England, as well as that of Holland in the Indian seas, gathered the products of every accessible people and brought them to Europe, where they passed under the general name of Oriental or Chinese wares. Numerous pieces of blue and white porcelain are found in the possession of old families in this country, which in their peculiar glaze are unlike the Chinese or Japanese.

The absence of marks has led many to doubt the existence of Persian porcelains. The larger portion of these wares are without marks, but the failure to collect Persian marks may be due to the want of observation of the more common wares, on which they occasionally occur. We have a number of vases of different forms, decorated with designs Persian in character, and not Chinese or Japanese in manner, which we believe Persian. No marks occur on them. A small bowl in our collection, rudely decorated with a few dashes of cold pale blue, which is black and almost lustrous where the brush has left the color thick, has on the bottom the unintelligible mark in the margin, in blue (Ill. 85). The glaze on this bowl is peculiar, having a green tint where thick, and a little of that peculiar pearly character, familiar to those who know the modern wares glazed with bismuth preparations. The foot is small, high, and perpendicular on the inside. The ware is fine hard-paste porcelain.



85.

Another small bowl in our collection is also rudely decorated in the same color, but with an indication of artistic freedom showing that it was not done by pattern. The glaze is identical with the last described; the foot is the same, and the ware of the same fabric. This bowl has the mark in the margin (Ill. 86) twice, in the inside bottom, drilled through the glaze with no small labor.



86.

Another bowl in our collection is of fine green céladon outside, paler inside, with the same characteristic foot, and the same glaze on the bot-

tom. It has on the bottom the mark in the margin (Ill. 87), the Chinese house-mark being in bright blue, and the characters by its side cut through the glaze with the point of a drill. The same drilled mark is repeated on the inside bottom of the bowl. These marks, especially those drilled by an instrument with all the labor of engraving a hard stone, may be Chinese or Japanese, but if so, were not executed by one familiar with the languages and modes of making lines for their signs.



87.

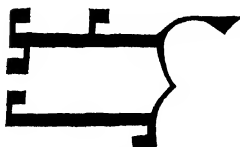
Chinese house-mark

But a bowl precisely similar to the second above described in foot, glaze, color, and pattern of decoration, better executed, and a larger specimen, is in the collection of Mr. G. Trumbull, of Hartford, obtained from an old Connecticut family, in whose possession it had been for some generations. This bowl has on the bottom the mark in the margin (Ill. 88) in blue, which is doubtless Persian. There is no doubt that all the four bowls described are of the same fabric. The specimen last described has a peculiarity in the decoration. The pattern has been pricked out with a point before the color was laid on.



88.

A water-jar in the collection of Mr. Robert Hoe, Jr., in New York, is of the ordinary surahai form, except that it has a small handle on the side of the neck. The decoration in pale blue is Persian in character, and on the bottom, in blue, is the mark in the margin (Ill. 89). This specimen is translucent, a coarse hard-paste porcelain.



89.

Mr. Hoe has also a small covered mug, of pure white porcelain, enamelled with palm-leaves, rosettes, etc., in yellow, green, and red, unquestionable Persian work, closely resembling work on "Danas-cus wares." This cup has on the bottom the marks in the margin (Ill. 90) in red. Attention to the subject will probably add largely to the list of marks on Persian hard-paste porcelains.



90.

Readers of Arabian tales are accustomed to meet with references to feasts served on splendid porcelain. It is a fact that the wealthy among the Arabs have in their houses abundance of porcelain, much of which they treasure with traditions that it has been in the possession of their ancestors for many centuries. Some which we have thus found is apparently Chinese or Japanese. But other varieties are of classes which we hesitate to assign to any known fabric, although giving many indications of Persian origin.

Among the interesting episodes of travel in the East, we recall the discovery and acquisition of many fine specimens of pottery and porcelain.

While chatting with a number of persons, mostly Arab, in a shop on the Street of the Holy Sepulchre in Jerusalem, the subject of old tiles came up, and led to the remark by an Arab resident of Jerusalem that he had in his house some old porcelain which had been in the family many centuries. Arab statements of antiquity are not much to be relied on, but the collector never hesitates to look at pottery or porcelain when he hears of it, and the possessor of these dishes of fabulous age readily consented to bring them at once for inspection.

They proved to be a series of six noble dishes, ancient, wherever made, of exquisite character and beauty. Fifteen inches in diameter, bowl or saucer-shaped—that is, sloping by a single curve from the rim to the level of the bottom—they are decorated in blue under the glaze, with vines having large broad leaves and great clusters of fruit, wandering over the entire interior surface in such profusion as to cover and nearly conceal the white ground. The porcelain is remarkably thin, much thinner than in any Chinese or other wares of the size we have met with, pure, clear, and translucent. The foliage and fruit are different on different dishes, but the execution the same. These belong to a class of porcelain which would be assigned to China, according to the opinions ordinarily received, but the vines, leaves, and fruit are wholly dissimilar to any we have seen on Chinese work, the execution is more free and artistic—the whole “look” of the dishes is not Eastern Asiatic.

The purchase was accomplished in the Oriental style. The owner valued them at a price equal to their weight in gold doubled, and we offered a price equal to half their weight in copper. The day passed on over Jerusalem, and the sun had gone down into the sea before the trade was ended. They cost a price, but they were worth it. The result of this commercial transaction was apparent in Jerusalem next day, and many Arab families desired to turn their pottery into gold. Among these sellers of ancient household goods was one who told us that he had great quantities of porcelain of brilliant character, which had been for four hundred years in his family. “Would we come and see it?” “Yes, certainly;” and we went. For once an Arab had not exaggerated. It was a great quantity, and very brilliant and curious. He was of an old and well-known family, and his house was of some pretence. In the reception-room, whose ceiling was some eighteen feet high, we found a high shelf, running around the room near the ceiling, accessible only by bringing in a ladder. On this were arranged, in gleaming rows, large and small

dishes, plates and bowls, dust-covered, but resplendent with rich enamels in red, blue, yellow, green, and gold.

We sat down on the diwans, and one by one the shining porcelains were laid on carpets spread over the stone floor of the room. "Where did they come from?" Neither he nor his half-dozen friends, who had come in to help the bargaining, could tell. Only the master of the house averred, and his friends sustained him as solemnly in the averment as if they had all lived in Jerusalem long before the days of Suleiman the Magnificent, that an ancestor brought them to Jerusalem more than four hundred years ago. They were well preserved, in perfect condition, except some smaller pieces which had seen service.

"Do you use them now?"

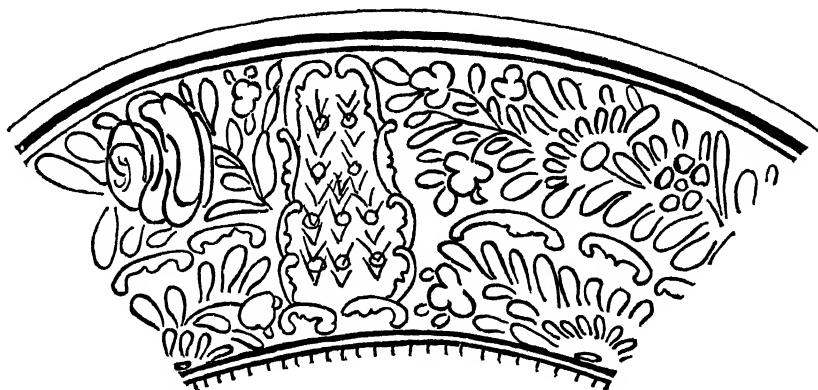
"Mashallah! No. They are too precious antiques;" and much more of the same sort, to enhance the value in the bargaining, which now began. But here a new element entered. It was a wily dodge of the Arabian to say that they belonged to the women, and he did not know if they would sell them at all. "Then why did you ask us here? We did not come to see your porcelain;" and we rose to go. "Wait, and I will ask the women if they will sell them." Thus began an odd chaffering. We could not select pieces, but the women would sell the whole or none. Back and forth to the harem rooms trotted the indefatigable bargainer, doing an unreasonable amount of work to keep up the stupid myth that a female party controlled and directed his gradual approaches to a price per piece which we were willing to give. For the dicker (in American parlance) began by his bringing in from the harem an offer to sell at so much per piece, an offer based on previous purchases which he knew we had made. Some of the specimens were worth literally fifty times the value of others; and as there were about a hundred pieces, it was necessary for us to make a rough estimate of total value, and constantly multiply the offers per piece to know how near they approached a fair closing price. It was finished at last, the day having been consumed again, and only finished at the door-way in which we stood, ready to depart indignant at his unreasonableness, and followed closely by his friends who vociferated their assurances of the value and antiquity of the articles.

It does not concern the subject to relate the packing of the quantities of pottery and porcelain there and elsewhere obtained in Jerusalem, a city destitute of packers, in which hay is unknown, straw only found in the form of cut straw for donkey feed, slippery, glossy, unfit for packing breakables, and where even wrapping-paper was then almost unknown. Cotton cloth and the cut straw, however, made soft wrappers, and stout

boxes were built for the occasion. We saw our purchases swinging in pairs of boxes on the sides of camels, going out of the Jaffa gate, and watched them as they disappeared along the mountain road leading to the sea-coast, mentally convinced, and resigned to the conviction, that we should find them again only in fragments at the end of their long land and sea journey. But they came to New York in as perfect order as they had first come to Jerusalem, and are classed now in our collection among specimens of Persian, other Saracen, Chinese, and "unknown manufactures, probably Asiatic."

Among the articles purchased from the unseen women of the harem were some probably of Chinese origin. A bowl of fine porcelain, decorated in a shining blue under the glaze, with groups of Chinese symbols, is marked with the very ancient mark of two fish; and another bowl, with less rich blue, has another form of the same mark. The former is a rarely beautiful specimen of porcelain and color. Two other large bowls, of more doubtful origin, have the entire ground blue, one a deep lapis lazuli, the other a very unusual shade of leaden hue. Over these grounds run tendrils and leaves, in faint touches of gold. Other pieces are of doubtful origin. We have spoken of numbers of large dishes. The Oriental custom of eating meals in groups around small tables leads to the possession, as table furniture, of those large metal dishes, on which the food is served in mass, each one helping himself with his hands. The course ended, another dish with another course is brought in. In old families of wealth, porcelain dishes were used in place of metal, and hence it results that we sometimes find in the East, what is at least very rare if at all known elsewhere, large services of these great porcelain dishes. For the same reason bowls of large and small size are more common in the East than elsewhere, and services of bowls on dishes, uniform in decoration, are sometimes met with. The ladies of the harem supplied our collection with some admirable specimens of large dishes, and bowls with plates, illustrations of Eastern customs as well as of fine ceramic art. Nothing can be more striking than the appearance presented by a service consisting of twelve large deep dishes, each fifteen inches in diameter, hard-paste porcelain, of uniform decoration in brilliant blue, rose-red, green, and gold. These colors are laid on over the glaze in a thick enamel, so that every part of the decoration is like embossing. In the centre of the dish a red rose is surrounded by green leaves, and blue and red flowers, all executed by laying the enamel from a broad brush. Green leaves are made by a single stroke of the brush, leaving a heavy mass of thick enamel. The interior sloping borders of the dishes are

covered with the decoration here shown in outline (Ill. 91) executed in the same enamels. The paste is good and very translucent, the glaze a



91.

smoky white varying on different specimens, with somewhat of the pearl-shell characteristic (produced by the use of bismuth in modern works), and each piece has three support marks.

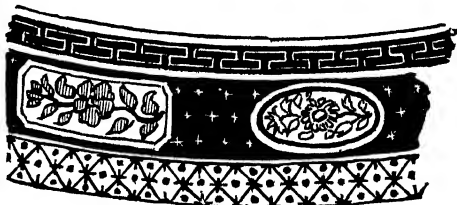
Besides these, we obtained about forty bowls, of various sizes, and of three patterns of decoration, each bowl on a corresponding dish, the porcelain and glaze of the same sort with the large dishes.



92.

The first series of bowls was decorated with the pattern here shown (Ill. 92), ex-

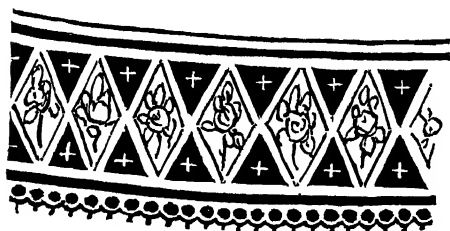
ecuted in the same enamel and colors as the large dishes, except that the pattern is on a salmon ground, slightly washed with gold. Next was a series of bowls decorated as here shown (Ill. 93), in a superb deep-blue enamel, with gold meander, stars, etc., and a slight use of iron-red. No other color appears. The flowers in the rectangular medallions are blue and gold, those in the ovals are gold only.



93.

A third series of bowls and dishes had the decoration here given (Ill. 94), the colors like the last series, but the small flowers in the diamonds

are rose-red and green, and an interior bordering has the same colors. Support marks occur occasionally on the bottoms of plates, in all these series.



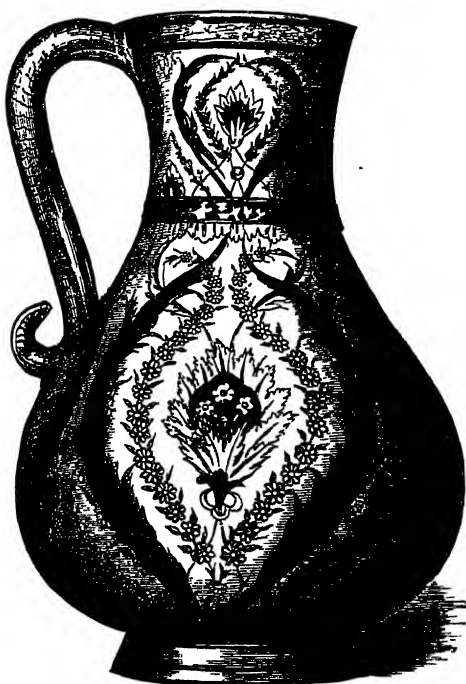
94.

The blue enamel on all is of the same character, laid on over the glaze, to which it adheres so slightly as to be easily broken off in places, leaving the white glaze exposed. The blue is of the deepest *bleu-de-roi* shade, the green a vivid apple-green, the red of two colors—one, rose-color, deepening

to lake-red where thickest, the other a yellowish iron-red. We have never met with this blue on a Chinese or Japanese specimen.

DAMASCUS WARES.—The term Damascus or Damas wares was used in Europe in the fourteenth and fifteenth centuries, to describe various Saracen pottery vases and dishes. Thus in 1380, in the inventory of Charles V. of France, is found, *ung petit pot de terre en façon de Damas; ung petit pot de terre à biberon sans gurnyson, de la façon de Damas*; and in 1420, in the inventory of the Duke of Burgundy, is mentioned *ung pot de terre de l'ouvrage de Damas blanc et bleu, garni le pié, et couvercle, que est de jaspre, d'argent doré, un anse de serpent d'argent doré*. Mr. Fortnum says that in England examples are known in silver mountings of the period of Queen Elizabeth.

The decorations as well as the general character of the pastes in a very large class of pottery made in various Saracen localities are so much alike, and so distinct from other classes, that Mr. Fortnum's proposal that the name Damascus or Damas ware be revived for this family is an excellent suggestion, which we adopt.



95 Damascus-ware Jug, height 18 inches.
(Huth Coll : Marryat)

These wares seem to have been made more extensively at Damascus and Rhodes than elsewhere, but were probably produced in many places. They have been commonly called Persian; but the name is neither correct as to place of manufacture, nor always correct as to style of decoration.



96. Rhodian Dish, diameter 15 inches. (Huth Coll.: Marryat.)

The paste varies slightly, according to the locality of manufacture, and even in the same localities. It is usually an uneven white, and coarse in quality, sometimes light and lacking compactness, sometimes hard, compact, and sonorous. The decorations are generally very brilliant. A blue or white ground is most frequent; turquoise, chocolate, or lilac less common. On dishes a common and characteristic covering of the ground or of borders is in small scrolls or spirals, executed

by a rapid turn of the brush. Flowers are much used in the decoration in blue, turquoise, purple, green, yellow, black, and a brilliant brick-red. Hyacinths and carnations are the most frequent flowers; but tulips, roses, and a few smaller flowers are common. The more ordinary forms are dishes, bowls, bottles, and jugs for water. Bowls were made on feet. Water-jugs of graceful shapes, with high necks, and with arched handles, and lamps for mosques, with central vases, are among the most interesting as well as the oldest known specimens.

An Oriental symbolism, the origin of which may be in one of a half-dozen reasons, no one of which is certain, has made the egg a favorite ornament for the interior of Christian churches and Mohammedan mosques in the East. Ostrich eggs abound, plain and decorated with paintings, hanging in all parts of the buildings. This is a very ancient custom, and led, at an early period, to the imitation of these eggs in pottery with white enamel. M. Jacquemart seems to regard some of these as among the earliest known specimens of Saracen pottery. A group of these eggs formed the hanging ornaments of a lamp in the Church of the Nativity at Bethlehem, where we chanced to pass a night just when this ancient luminary broke the rusted chain by which it had hung, uncleaned, for centuries, and fell to the stone floor. The eggs were fragile, but four of them

sustained the shock, and, being no longer of use to the lamp, naturally found their way to our collection. One of these has a clear, pure white glaze, under which are decorations in pale-blue arabesques. The others are of coarse paste, yellowish glaze, with decorations of rude cherubs' heads, and crosses of the Jerusalem pattern, painted in yellow, blue, and green.

Many of the dishes of this ware, especially some which are decorated with the brilliant red, are in all respects like tiles which we have found in Cairo. A special resemblance consists in the use of the red, which is always laid on so thick as to produce a decided relief or embossed effect; and from this it occurs, in many pieces which have been rubbed in use or exposure, that the glaze is broken over the red, and the color escapes or can be scraped out in powder. This red is one of the most brilliant and effective colors found in ceramic art. It appears remarkably strong and rich on a dish in our collection whose decoration consists of long, narrow, waving leaves, half red, half green, diverging at right angles from centres, and forming open squares on the dish, in which are balls of dark blue, a red and a green spot on each.

The tiles from Cairo decorated in these colors, and resembling the dishes, are more fragile than any others. In two cases, containing a hundred and fifty tiles, sent from Alexandria to New York, which were shipwrecked on the way, while other varieties suffered some breakage, twenty of this class were reduced to small fragments, and hardly one escaped total destruction.

Mr. Fortnum is of opinion that the wares made at Damascus may be known by "evenness of surface and rich glaze, with subdued but harmonious coloring, certain tones of which are peculiar to this variety, as a dull lilac or purple replacing the embossed so conspicuous on the Rhodian, and used against blue, which is of two or three shades, the turquoise being frequently placed against the darker tone; a sage green is also characteristic. The dishes of this variety usually have the outer edge shaped in alternating ogee." We find this opinion confirmed by the color decorations of tiles found at Damascus.

The island of Rhodes was the seat of ancient Greek potteries, and in the early tombs of Kameiros specimens of glazed ware somewhat resembling the Egyptian have been found. Possibly glazed wares were made there continuously down to modern times. In the sixth century, the



97. Pottery Egg, from the Church of the Nativity at Bethlehem. (T.-P. Coll.)

church dedicated to the Divine Wisdom, now the Mosque of St. Sophia, in Constantinople, was erected by



98 Rhodian Dish. Decoration in red, green, blue, etc. (T.-P. Coll.)

Justinian (531–538 A.D.). The writers of Byzantine history and others describing it at the time dwell more or less on the luminous splendor of the decorations of the dome, which was probably in mosaic work. One speaks of “*vitreo lapides fulvo auro supertectos.*” “Crystal made with fire” is an expression used by Paul Silentiarius, who wrote a poetic description of the church at the time of its erection; and other writers use expressions in regard to some of the work which may indicate the use of enamelled tiles. An anonymous

Greek writer says of the dome, *κατεχρυσωσε τα οροφα εξ υαλινου χρυσου λαμπροτατα*, which Du Cange, in his commentary on Paul Silentiarius cites, and translates *tesselis vitreis inauguratis*, distinguishing them from mosaic. The editor of “Murray’s Hand-book,” describing the mosque, gives Paul Silentiarius as authority for this account: “The tiles on the arch of the cupolas, which astonished every eye by their extraordinary lightness and boldness, were prepared at Rhodes of a particularly light clay, so that twelve of them did not weigh more than the weight of one ordinary tile. These chalk-white tiles bore the inscription, ‘*God has founded it, and it will not be overthrown. God will support it in the blush of the dawn.*’ When the building of the cupolas at length began, the tiles were laid by twelves, and after each layer of twelve tiles relief were built in, while the priests sang hymns and prayers for the durability of the edifice and the prosperity of the church.” This minute account of the tiles we do not find in the poem of Silentiarius; but if it be from any writer of the period, it would establish conclusively the making of painted and possibly enamelled tiles at Rhodes in the sixth century.

This is one of the few indications which we possess of the use of glazed potteries at this early period. It is not improbable that Rhodes continued the manufacture without interruption down to modern times. There are many ancient tiles in Eastern buildings on the Mediterranean shores which may have been made here, and the faience eggs, with Chris-

tian symbols in the decoration, found in old churches (such as those which we obtained in Bethlehem) may possibly be of the early Rhodian fabric. In the seventh century (616 A.D.), the Persians, under Chosroes, captured Rhodes, and held it a few years. It remained under the Eastern Empire after that for a brief period, was occupied by the Saracens in the seventh century, and thereafter had varying fortunes alternately under the Greek Empire and the Genoese, and the princes of Gualla, who, having been its governors under various powers, asserted and maintained an independent sovereignty. In 1306, the Knights of St. John, expelled from Acre, and having the form of a grant from the Emperor Emmanuel, besieged and took Rhodes, where they established themselves until the memorable siege and conquest, in 1522, by the Turks under Suleiman II. Potteries made at Lindus during the occupation of the knights are known, as they bear the cross of the order. A tradition says that some Persian potters on their way to Venice were wrecked on the island. Another suggestion is that the knights brought Persian potters with them from Acre, and established a pottery. The more probable theory is that from the time of Justinian potteries had existed, and that during the Saracen occupation, if not before, Persian styles were introduced.

Mr. Salzman found remains of old Saracen furnaces at Lindus; hence the Rhodian potteries have been sometimes called "Lindus ware." The decorations on Damascus ware which have been described are characteristic of the Rhodian fabrics, especially the brilliant red, which forms almost a relief, and the scroll borders. Ships, birds, animals, and shields of arms occur.

A very large number of specimens of all kinds of Damascus ware (excepting tiles) now in European collections have been found in Italy, where the Saracen potters had their best market. Italian palaces were furnished by them in the fourteenth and fifteenth centuries, and perhaps at an earlier date. From this fact, as we shall hereafter see, arose the splendor of ceramic art in Italy in the beginning of the sixteenth century. Several fine dishes in the Trumbull-Prime collection, one of which is illustrated (98), were found in an Arab tomb at Cyprus, accidentally opened by General Di Cesnola while excavating at Dali. The circumstance is unusual.

Other varieties of Saracen wares, exceedingly rare, and some known only in fragments, cannot be assigned to any special locality. Dishes and vases lusted in gold and copper are now very generally supposed to be of the fabrics of Spain, the Majorcan islands, or Sicily under the Moors; but this is far from being certain. On the contrary, it is possible and

probable that wherever there were extensive potteries, there the lusted wares were made.

The extended commercial facilities of the Saracens may have distributed the products of Valencia, Malaga, and Majorca throughout the East; but from the vast quantities of old Saracen pottery of all kinds which we have found buried deep in the mounds around Cairo, and on the slopes around Jerusalem, we are inclined to believe that many varieties of ware were made in the same localities.

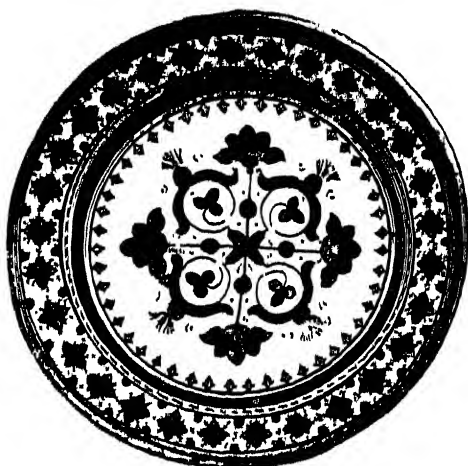
The mounds around Cairo have furnished us with many specimens. These were not found in any one locality more than in another. Travellers are familiar with the vast heaps which surround all Eastern cities, and which are composed largely of broken pottery, in such quantities that one would think there had been enough pottery broken in one city to supply the world for centuries. On the north, east, and south sides of Cairo these fragments lie in unlimited quantity. The only special locality which we have noted was on the south side, where in 1869 a new carriage-road had been cut nearly on a level grade from the outskirts of the city through a long succession of pottery mounds, which stood on both sides of the road to a height sometimes reaching thirty feet. Here, in the lowest level of the mounds, we took out fragments of pottery, which may fairly be supposed the broken wares of Cairo thrown there when the mounds had not yet risen much above the level of the city within the walls. Among these was a piece of the side of a large heavy vase, very strong, hard pottery, black throughout, three-eighths of an inch thick, covered with a gleaming stone-colored enamel, green, yellow, and gray mingled in, soft tones, over which are arabesques, leaves, etc., in deep brown. The glaze is pure and fine over all. Another fragment, part of a bowl or dish, is of red pottery, close and compact paste, covered with a delicate yellow, or straw-colored enamel, on which are Arabic letters, admirably executed, two inches long, outlined in brown and filled with white. This is a relic of a very beautiful piece of Saracen work. Various fragments of dishes and the foot of one vase are of very light soft pottery, reddish-white paste, covered with white enamel, on which are leaves and arabesques in gold lustre, in the Hispano-Moresque style. A fragment of coarse red pottery with a brownish-black glaze looks like the bottom of a modern crock, with a device in green and white mingled, on the centre of the interior. Many fragments were of hard pottery, glazed in yellow.

A remarkable fragment, found with these, is evidently the remains of a lamp of ancient pattern, like a small cream-pitcher with open top, the

pinched nose black with smoke. This is of soft pottery, covered with a rich and brilliant green enamel such as we have on old Damascus tiles.

Without further enumerating the varieties of pottery in the mounds around Cairo, enough has been said to show the extent to which the manufacture must have been carried on in that place, or the wide-spread commerce of the Saracens which supplied the East with the fictile products of the West. It is no exaggeration to say that in the one spot where we gathered the specimens referred to there were cart-loads of similar fragments.

NORTHERN AFRICA. - The old Saracen art, which had travelled along the north coast of Africa and crossed into Spain, lingered along its line of travel. Potteries have been made in Tunis, Algiers, and all the Mohgrabbin settlements without interruption down to the present time, retaining in their styles and decorations some of the old beauty of color; vases, bowls, dishes, water-bottles, and other articles, at a distance present a brilliant appearance, produced by a rude decoration, in the style shown in Ill. 99. It is impossible to determine the comparative age of these wares. Some are quite modern, others of the eighteenth century. The paste is coarse and very heavy, apparently a stone-ware, the glaze generally a cold gray. Check, diamond, circular, and arabesque patterns are colored in green and yellow under the glaze, and, after baking, a bright-red pigment is used, in lines, spots, and large blotches, to give a final effect of brilliancy, which is successful, but not permanent, as this color wears off. Tiles are made for architectural purposes; but we have found that the tiles in palaces in Tunis are in some cases of old Italian fabric, made in styles to suit the Arab taste.



99. Pottery of the Mohgrabbin. (T.-P. Coll.)

Egypt produces a great abundance of common unglazed potteries, and some in bright-red clay, others black, which are polished up to the lustre of the old Greek wares. All along the track of the Arabic civilization in Africa, and even among the savages with whom the Arabs have traded, unglazed pottery is made in good forms learned from the Arabs. A

water-jar from Ugogo, and a group of pottery from Ujiji, for which we are indebted to Cameron's "Across Africa," will serve to illustrate modern styles in the negro country.



100. Ugogo Pottery. (Central Africa.)

CHANAK-KALESI ("the pottery castle") is the name given by the Turks to the "Castle of Asia" on the bank of the Dardanelles. The name is derived from the manufacture of faience here, which has been celebrated for a long time. Travellers are familiar with the grotesque water-jars, brilliantly colored and well

glazed, which are brought on board steamers touching here, for sale to passengers.

For how long a time the manufacture has been carried on is not known; but wares of a peculiar kind have been made since the last century, and it is not impossible that among the superb tiles which ornament the mosques in Constantinople some were made on the Dardanelles. In the year 1856 the venerable sheikh of the Mosque of Omar, in Jerusalem, told us that it was then determined to repair the Dome of the Rock, and that new tiles were to be made at Chanak-kalesi, where he believed many of the old tiles were made. The fabrics are varied in form, supplying the domestic purposes of the Turks in many of the Mediterranean cities.



101. Ujiji Pottery. (Central Africa.)

Water-jugs, bowls, perfume-burners, ink-holders, cups and saucers in European style, and other objects are decorated variously. Specimens of the modern fabrics in our collection are of good pottery, coarsely glazed, colored unevenly in turquoise, purple, deep green, and yellow. White cups

and saucers have rudely painted flowers, with leaves and border lines in a good pink copper lustre. This is the last of the Saracen lustres.

The grotesque water-jars seem to have been a speciality of the pottery of Chanak-kalesi for a long time. An ancient specimen exhibited at Philadelphia in 1876, in the Egyptian department, elaborate and not unartistic in style, was possibly of the sixteenth or early seventeenth century. One in our collection, yellow, with splashes of green, a bird and flowers in relief, with leaves painted in lustre after baking (Ill. 102), is perhaps of the last century. Another in our collection has a rich dark-green glaze, with rosettes, etc., in lustred reliefs, and another is gayly decorated with horizontal bands of red, crossed by perpendicular stripes of green and black, on a rich yellow ground: the neck is in tortoise-shell. These wares, still produced, are the latest representatives of that art which has left throughout the East such abundant relics of its splendor.



102. Water-jug, in yellow.
Height 18 inches. (From
Chanak-kalesi. T.P. Coll.)

HISPANO-MORESQUE POTTERY. In the beginning of the eighth century (712 A.D.), the Arabian flood reached Spain and swept over it. In 756 A.D. Abd er-Rhama, having expelled his Mohammedan predecessors, established his caliphate at Cordova. The wall tiles of the mosque at this place are lasting examples of the art of the Saracens. In 1090 the Moors accomplished the conquest of Spain, but we have no relics of their art in pottery prior to the building of the Alhambra, decorated with tiles at Granada in 1273. With this date commences the series of works now styled Hispano-Moresque. The Vase of the Alhambra, so called because found under the pavement of that structure, is four feet three inches high of pottery, white ground with ornaments in two shades of blue and in gold or copper lustre (Ill. 103). Its date of manufacture is supposed to be about 1320.

The discovery of this pottery as a manufacture of Spain is quite recent, and due to M. Riocreux, the coadjutor of Brongniart at Sèvres. Large quantities of the ware, previously classed with Italian majolica, and found in Italy, are now placed in the Hispano-Moresque group. Mr. J. C. Robinson, of the South Kensington Museum, an able authority, considers these pieces to be of the earlier period which have decoration in the paler yellow lustre, with interlacings and other ornaments in manganese

and blue—animals, coats of arms, etc.—those having the ornaments in the pale-yellow lustre only, without color, to be nearly of equal date, and also



103. Vase of the Alhambra.

some of the darker copper lustre pieces with shields of arms: he places at a later period those with glaring copper lustre. The specimens decorated with dark copper lustre in diaper and scroll patterns without color are probably not Moorish, but Spanish work of the seventeenth and eighteenth centuries.

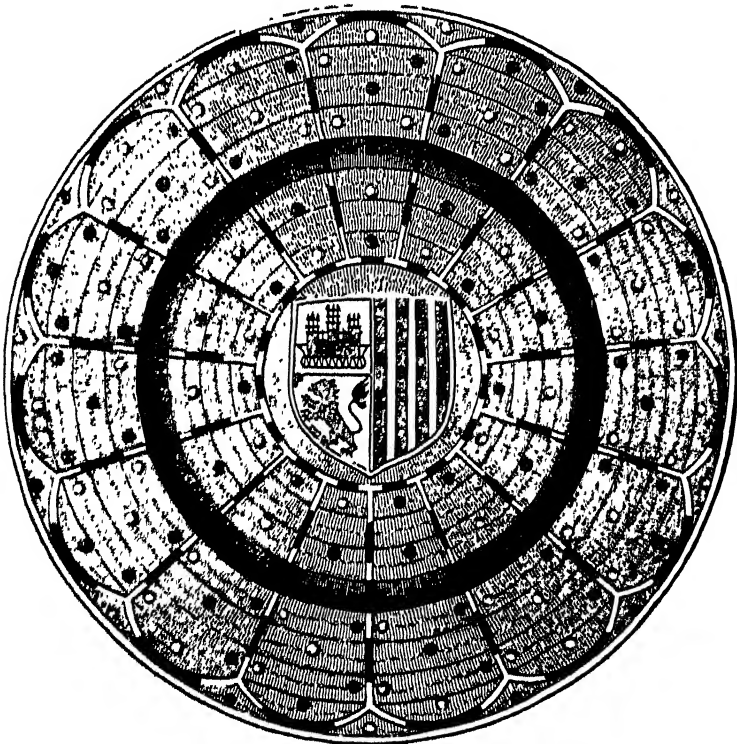
The date of the Hispano-Moresque pottery is from the fourteenth to the beginning of the seventeenth century. As the wares are made with stanniferous enamel, this Saracen work in Spain antedates the introduction of the art into Italy by more than a century. The patterns of the decoration are varied, and curious rather than beautiful. Small ivy or briony leaves, in blue or in lustre, arranged in circles, bands, arabesques, covering the entire surface of the piece, or otherwise disposed, diaper patterns in lustre or color, scrolls of various sizes, are common ornaments of the grounds. In the centres of dishes are shields of arms, animals, flowers, and other designs. Christian emblems and inscriptions are found. Large

vases are known, of similar character to the Alhambra vase, and bowls, drug-pots, and dishes.

It is with great diffidence that we venture to express a doubt whether there is not danger that many articles may be assigned to the fabric of the Moors in Spain which were made elsewhere. The Saracen art is so much alike, wherever practised, that no one style of decoration can be deemed characteristic of a locality. The large quantities of fragments of pottery, decorated in gold lustre, with ivy leaves and other patterns, which we have found at great depth in the mounds around Cairo, lead to the belief that these wares were made also in Egypt. It is possible that they were made in various other localities, as well as in Spain.

Ibn-Batoutah, writing about 1350, describes a visit to Granada and Malaga. He says of the latter, "At this place is manufactured the beautiful gilded pottery or porcelain which is exported to the most distant

countries." This factory is mentioned in 1517, but no later. It is probable that the Alhambra vase and its lost companion, which was in existence in 1764, as well as the fine vase in the South Kensington collection, and three in the Museum at Bologna, are all of the fabrie of Malaga. The Alhambra vase has been copied at Sèvres, and by a modern French maker of faience, who also produces good copies of various Saracen work. The pottery of Malaga is supposed to be the most ancient of the Hispano-Moresque work. After it in order of time is placed the fabrie of Majorca, interesting as giving the name *majolica* to the lusted and other wares of Italy.



104. Hispano-Moresque Dish: Arms of Castile and Leon and Arragon. (British Museum.)

Saguntum, near VALENCIA, was celebrated in Roman times for red ware. It was the seat of extensive potteries. There is no known relation between these and the works established by the Saracens in the eighth century, or their successors, the Moors. In 1239, James I. of Arragon granted a special charter for making pottery to the Saracens of Xativa, now San Felipe, which mentions vases, domestic pottery, and *rajolas*--another name for wall tiles. M. Daviller thinks lusted pottery

was introduced from Malaga, not earlier than the fifteenth century. The Valencia potteries were probably the most important and extensive in Spain. Marineo Siculo, in 1517, says the faience of Valencia was the most esteemed of all in Spain.

It is not quite certain what wares are to be assigned to Valencia. The special veneration there paid to St. John the Evangelist, and the use there, in processions, of the eagle, with the first words of his Gospel on a banner, "In principio erat Verbum et Verbum erat apud Deum," has led to the supposition that Hispano-Moresque wares, several specimens of which exist bearing the eagle and this inscription, are of the Valencia fabric. In the British Museum is a plate, painted with an antelope and

a Moorish ornament in blue, and the words SENTA CATALINA GUARDA NOS, also supposed to be of this fabric. Pottery wares were made here till the early part of the present century, but the Hispano-Moresque character is not found later than the early part of the seventeenth. Copper lusted wares were made in 1780 at Manises, and M. Davillier found recently the last representative of the fabric in an innkeeper at Manises, who, with his wife assisting, had a wheel and small furnace, and produced lusted pottery.

There were other places in Spain where the Saracen pottery was made. Barcelona faience is mentioned in 1491. Marineo Siculo is authority for potteries at Murcia, Morviedro, Toledo, Talavera, and one or two other places. The wares of these several places are not distinguishable.

Marks of makers or places of fabric are almost unknown on the Hispano-Moresque pottery. Two plates are known with daubs of color on the bottoms, which are as likely to have been unmeaning dashes of the painter's brush as anything else, and are of no importance.

SICILY.—Two classes of ware, of which specimens have been found in Sicily, are named SICULO-ARABIAN and SICULO-MORESQUE. The latter are found at Calata-Girone, and are ascribed to Moorish potters, as distinct from Arabian potters, a distinction which is without sufficient foundation, and impossible in examining the masses of broken pottery surrounding



105. Hispano-Moresque Vase (Valencia), with Christian Inscriptions.

Eastern cities, where all varieties are found together. The Calata-Girone wares have a stanniferous enamel surface, with copper-lustre ornamentations. The enamel is remarkably fine, the lustre patterns are small and richly used, and specimens are rare. Mr. Robinson thinks that a fine specimen, with deep blue enamel, in the South Kensington Museum, is an Italian imitation of the old Persian or Damascus wares.

The pottery classed as Sienco-Arabian is similar in paste to the Rhodian wares, and is decorated on the paste in blue outlined with black, or with lustre over the enamel somewhat different from either the gold or the copper lustre of the Hispano-Moresque. We have found fragments of similar pottery in the mounds around Cairo. The Sicilian origin of both these varieties is doubtful. Arabic inscriptions, generally illegible, occur on the Sienco-Arabian. The ware may be an ancient fabric of Eastern potteries.



106. Sienco-Arabian Vase. (Castellani Coll.)

MAJORCA. The Balearic islands are interesting as the seat of ancient Saracen potteries, and as having given to the Italian language the word *majolica*, as descriptive of some sort of pottery.

This derivation of the word *majolica* is given by the elder Scaliger; and his remarks in connection with the subject are not only interesting and amusing, but somewhat puzzling as to what sort of ware he supposed to be *majolica*.

Jerome Cardan ("De Subtilitate;" Nuremberg, 1550), writing of the clay of Waldeburg, had said:

Videntur enim sigulorum vasorum esse hæc quinque laudes, ut sint levissima, ut non sorbeant, ut non exudent, ut non facile frangantur, ut ignibus resistant;

and, proceeding with a short discussion of the *vasa murrhina*, after quoting Pliny's description, adds:

Ergo quis non videt sigulina hæc esse et ejus generis quod (ut dixi) hodie Procellanas solemus appellare. Constant enim et hæc, ex succo quodam sub terra densato, et ex Oriente vehuntur. * * * Nunc longo Indiae tractu sunt maxime apud Chinam: hi olim Seres, ut alibi dictum est. Fieri dicuntur ex concilliorum atque ovorum corticibus: sepellunturque constanti fama in 80 vel 100 annos quasi in hereditatum loco. Inde eruta obducuntur vitro ne combibant. Succi autem quibus cortices excipiuntur, non satis noti sunt. Pinguntur etiam antequam vitrum superaddatur. Incertum est an excoquantur ob nitorem ac duritiem. Majora in pretio sunt, sed multum ab antiquis degenerant.

Julius Cæsar Scaliger replied with criticisms on this work of Cardan (*"Exotericarum Exercitationum Liber Quintus Decimus de Subtilitate ad Hieronymum Cardanum;"* Paris, 1557), in which, with an appearance of learning which is now very amusing, he corrects some of Cardan's errors. He seems to have been familiar with porcelain, for he first describes it critically, by various qualities; first, that pictures on it which scarcely appear are visible when opposed to the light, and the other portions, not painted, are translucent; second, that, when containing warm liquids, porcelain is warmed to the extent of the liquid, and not further. Thus much, he says, he knew from a few specimens "among the miserable relics of the house of the Scaligers." A third quality, he states—that now with his own hands he has proved—to wit, that fragments of broken porcelain will "strike fire." A fourth quality he attributes to the superstition or imposture of merchants, namely, that poison placed in porcelain will injure and even break it. He proceeds:

Fiunt hunc ad modum: Ovorum putamina et marinorum conchas umbilicorum (porcellanæ species horum sunt unde et nomen) in tenuissimum redigunt pollinem, quem aquæ subactum vasorum facie informant: subtusque terram conduit: centesimo anno pro perfecto, effodiunt ac venale opus habent. Quod eorum vitæ superest hæredi testamento transcribunt Quotannis conficiunt atque infodiunt, referuntque in commentarios ex quibus eruunt matura. Ex provincia China optima advehuntur. Alii putant non vasa sed materiam condi massam qua extracta confiant vasa. Horum pretiæ cum et opes et patientiam, postremo etiam fidem excederent, novo ingenio tam belle imitati sunt in insulis Maioricis; ut sæpe difficile iudicatu sint, utra vera utraque adulterina. Protectione forma, nec specie, nec nitore cedunt aliquando etiam superant elegantia. In Italia audio tam perfecta venire ut cuius cassitero, quod ibi vocatur Peltrum, anteferantur. Ea corrupta una litera, a Balearibus, ubi dicuntur excellentissima fieri, Maiolica nominantur.

These extracts from Cardan and Scaliger present a puzzling question. They are discussing porcelain, and especially porcelain of China. Scaliger knew what he was writing about. The old Scaliger collection had furnished him with general knowledge, and he had experimented with fragments. He must have been equally familiar with Italian decorated pottery of the best art, for he was born in Italy in 1484, and was long resident of Verona. Majorcan faience, too, had been common in Italy for a century. He was now writing in Paris, and says that the Majorcans imitated Chinese porcelain so closely that it was difficult to tell the true from the false; that the Majorcan was in no respect inferior to the Chinese in kind or in splendor. He says this was "*novum ingenium*" in Majorca. This cannot refer to the old art of lusted pottery, practised by the Saracens for centuries, and for fifty years at Gubbio, in a style infinitely surpassing the Majorcan potters. Nor would he say that any of that pottery resembled the Chinese porcelains so closely. There is

scarcely more resemblance between the two than between a wooden trencher and a silver dish. Besides, he is clearly not writing of the pottery which he knew when in Italy, but of a ware of new invention which he, now absent, *hears* has been brought to Italy in such perfection as to be preferred to pewter for use. This was something unknown when he had lived in Italy, yet those times were when pottery was in its glory. But at this very date—1555-'57—Ferrara was probably making porcelain as Venice had previously made it.

In short, we must arrive at one of two conclusions in explaining this passage. Either Scaliger knew what he was writing about when he undertook to criticise Cardan, and the Majorcan wares which he describes were true porcelain; or Scaliger knew nothing about the subject, and was as ignorant of the appearance as he was of the method of manufacturing porcelain. If the first conclusion be correct, majolica was a name applied in Italy to porcelain. Nor is the conclusion unreasonable. The Majorcans had extensive commercial relations. The Saracens controlled the commerce of the Mediterranean, and their caravans crossed Asia in all directions. Persian porcelain may have been brought to Majorca, and sold to Italy as a Majorcan fabric. The novelty of the ware is well known. It had been imported into Italy; Venice had produced it; Ferrara was then attempting its product, and probably had succeeded. It was the very ware to take the place of pewter, and the Saracens, wide-awake traders, may well have sent to Persia for it to supply the new demand in Italy, when Scaliger first heard of it. This is all guess-work indeed, and we have given space to the subject because it illustrates the obscurity overhanging much of the history of ceramic art.

The Majorcan islands were not only an important seat of potteries, but a great commercial centre of Saracen trade. Capinany (cited by Mr. Fortnum) gives the authority of Balducci Pegolotti for a list of towns in Italy trading with Majorca in the fourteenth century, and the statement that the island then had nine hundred vessels, some of which were of four hundred tons burden, and twenty thousand sailors. Giovanni di Bernardi da Uzzano (also cited by Mr. Fortnum) wrote a treatise on commerce in 1442, in which he speaks of the faience of Majorca and Minorca, which had then "a very large sale in Italy."

The manufacture of Saracen pottery in Majorca was of early date. Sismondi states that in the year 1113 the Pisans fitted out an expedition to deliver the many Christians taken by Moorish pirates and held in slavery by the Nazir of Majorca, which, in the next year, conquered Ivica and laid siege to Majorca. After a year of fierce resistance, Majorca was

taken by assault, the Nazir was killed, and the Pisan expedition brought home great riches, including much of the Majorca pottery. Many of the dishes were built into the towers and walls of Pisan churches, as thank-offerings and memorials of victory. Many churches were thus ornamented in Italy—at Pesaro, Pavia, Ancona, and other places. They are mostly of white ground, with arabesques of brownish yellow, birds, crosses, knots, stars, etc., some with blue grounds, many blue without ornament. This style of decoration may have originated with the spoils of the Saracens. It continued till the time of Luca della Robbia, in the fifteenth century. The best work on the Hispano-Moresque pottery is Baron Davillier's "*Histoire des Faïences Hispano-Moresques à Reflets métalliques*," Paris, 1861.

In leaving the subject, it may be remarked that the estimate placed on Hispano-Moresque pottery during the past few years is altogether above its merits. It is rarely beautiful, either according to our standard or the highest standard of the Saracens. It never equalled the work of the Saracens in other styles; and the lustred wares are only curious. The importance of the lustred wares in the history of the art consists in the fact that the Saracens probably taught the Gubbio artists; but Maestro Giorgio's lustres are as far more brilliant than the Hispano-Moresque as a calcium-light is more brilliant than a candle.

II.—ITALY.

The people of Europe, for many centuries during the decline and after the extinction of the Roman Empire, had little love for pottery. Ceramic art almost disappeared from among the fine arts. The causes of this were various, and their examination would involve a careful consideration of the state of European society and civilization too extensive for present discussion. It is not, however, an evidence of barbarism that a people did not use pottery for high-art purposes. Rome in the days of her greatest luxury had neglected it; other tastes occupied the refined and cultivated, and there were always many of this class in Southern Europe throughout the ages commonly called dark.

Why the Christian world should fall in love with the characteristic arts of the worst enemies of Christendom may seem a difficult question for answer. Nations have often adopted the tastes of the nations conquered by them. The acceptance of even barbaric styles by civilized peoples is not without illustration in history. But Europe adopted the arts

of their unconquered Saracen foes, doubtless because of their power and beauty, which were of a sort to command the tastes of those who were able to possess things rich and beautiful. The Crusades and the establishment of the kingdom of Jerusalem had introduced the peculiar styles of Eastern armor, metal ornamentation, dress stuffs, and general decoration; but subsequent commercial intercourse had more to do with the permanent establishment of these styles among Christians. Trade is the powerful assistant and servant of art until art becomes established, and its products in demand, when trade suddenly ceases to be a servant and becomes master. The rich fabrics of Asia were sought by luxurious and splendor-loving Europeans. Then the Saracens, learning that their work could be turned into Christian gold, poured their fabrics into European markets; and as these were the only foreign goods, it was according to the law of all time that people should seek to possess them. So in our day the arts of China and Japan are visible in the furniture and decoration of thousands of American houses.



107 Luca della Robbia. (Fac-simile from Vasari, Florence edition, 1568.)

The gradual effect of Saracen styles on the artists of Europe in the Middle Ages is distinctly marked, and its study exceedingly interesting. For there were artists in Europe in those days. The freedom and luxury of the Eastern styles, the use of color without stint and without rule, as nature uses it, the rich effect of arabesque ornamentations, golden inlayings on metal, and golden lustres on pottery—all these were pleasing to the artists of Europe. Many of them were earnest, laborious men, who here and there in monasteries, or in their own houses, created out of loving and devout minds beautiful pictures of saints, and seized gladly from the Saracen ornamentations ideas wherewith to surround the pictures, and glorify the pages recording saintly thoughts and lives. To such men the fresh and free style of Saracen ornamentation in color was a revelation of beauty. Gradually this revelation came to the whole educated mind of Italy, and we find coincident with the beginning of the revival of art the introduction and reproduction of Saracen potteries.

The Saracens were something more than conquerors, spoilers, and pirates in the Mediterranean. They were also manufacturers and traders, sharp, active, watching for a market, and quick to supply it. The Christian people of Italy were not all devotees, nor were the knights all robbers. Society existed, and men and women were much such men and women as live now, and have always lived in all times. A fashion began to prevail in Italy of admiring Saracen fabrics, and was quickly supplied. Among other admired fabrics was the pottery.

It is impossible to say at how early a period native Italian workmen began to make pottery with lead-glazed surfaces. Probably this art had never wholly ceased. The monk Theophilus says that the Byzantine Greeks decorated pottery with vitreous colors, and elsewhere allusion has been made to the probable manufacture of tiles for the Church of St. Sophia in the sixth century. From the sixth to the twelfth century we have abundant relics of unglazed pottery, but few glazed. Germany furnishes more evidence of continuous mediæval art than any other part of Europe.

We are told of a plate found buried at Cividale del Friuli, with Lombard characters "incised on the glaze," which is supposed to be of the eighth century. In various parts of Europe glazed tiles were made for pavements throughout the early centuries, and this art must have been steadily known. Churches in Italy of the eleventh century were ornamented with disks and dishes of glazed and painted terra-cotta. Passeri, in his history of the wares of Pesaro, relates the extreme antiquity of the potteries of that place, dating from Roman times, suspended during the Middle Ages and revived in the fourteenth century. Mr. Fortnum found on a church at Pisa, built 1107, among the *bacini* in the façade, a fragment of a Persian or Damascus ware dish, and several others "of a coarse and probably native manufacture ornamented with rude painting in color, or with *sgraffiato* work, and covered with a lead glaze." These may have been of the twelfth century.

There is, therefore, reason to believe that lead-glazed pottery was made in Italy from the eighth to the fifteenth century, although examples are rare. In the Castellani collection are three small vases, found at Rimini, in the Romagna, in the walls of a building that was in process of destruction, which are rudely decorated in black and green, and covered with lead glaze. These are coarse pottery, but important specimens, probably of the early part of the fifteenth century, and good illustrations of the work of Italy at that time.

In the Phenician pottery has been seen a process of decoration by

incising lines through the glaze. The first advance in ceramic art in Italy, perhaps, consisted in an improvement on this—namely, covering objects with a coating of white earth, resembling pipe-clay, which was dried, and possibly slightly baked. Through this coating designs were scratched, so that the red or yellow color of the clay beneath was visible in the lines. This gave an effect of color without using paint. A lead glaze covered the work. These are now known as *Sgraffiati*, *Graffiti*, or *Incised* wares. Early specimens, supposed to be of the fourteenth century, have been procured from the churches at Pisa, where they were built into the façades. The majority of known specimens, however, are of later date than much of the painted wares.



108. Mezza-majolica Dish. (Pesaro? Castellani Coll.)

It was not till the fifteenth century that the fashion for Saracen patterns compelled the Italian potters to attempt to equal them. Passeri says that in the fourteenth century the art made great advances in Pesaro. The method of obtaining a white surface for the sgraffiato ware was a Saracen method, and probably learned or imitated from them. Much of the Saracen ware was thus coated and decorated with colors. The Italians used blue, green, yellow, brown, and black for painting, and adopted Saracen styles of borders and ornamentation. These wares, made without stanniferous enamel, painted and glazed, are called *mezza-*

majolica. In the middle of the fifteenth century Pesaro began to be famous for its products. Other manufactories were established in Italy. Princes encouraged the potters, who were probably in some cases themselves the artists. From 1450 to 1500, with rare exceptions, *mezza-majolica* was the only artistic ware produced in Italy. Viewed by our standard, it was poor art at the best. Viewed from a century previous, it was an advance. Viewed in comparison with Saracen contemporary art, it was inferior. The colors of the *mezza-majolica* are gaudy, but cold and thick, without life; the designs stiff, flat, and uninteresting; the execution in general rude, and much more archaic than contemporary painting on plaster, panel, or canvas. The execution is strangely inferior to wood and copperplate engraving which was contemporary with much of it in the latter part of the fifteenth century. Coats of arms, portraits, saints, and goddesses are common, usually surrounded with the favorite Saracen scale or other border ornamentation. Dishes painted with portraits of ladies, and inscribed with their names, to which "Bella" or "Diva" is attached, give a fearful idea of the standard of female beauty in Italy in those days, and excite wonder as to whether all the young women of Italy looked alike and had the same unmeaning countenances and features. A few exceptions to the rule of uniform ugliness occur in the case of some wares, supposed of Pesaro, which have a lustre known as the mother-of-pearl lustre, changeable when seen at different angles; but even this in general only serves to heighten the stiff paintings, in execrable taste, which it encloses.

The *mezza-majolica*, and not a little of the *majolica* which succeeded it, are merely curious specimens of early ware, and of the tastes of an age which was learning new ideas in art.

The *mezza-majolica* was made throughout the period of the best art in *majolica*. Potters who did not care for the higher art in decoration to which the stanniferous enamel, when introduced, so greatly contributed, preferred the old way of covering the pieces with clay, paint, and glaze.

Luca della Robbia, born 1388-1400, was a goldsmith in Florence, a profession of artistic order, but which he abandoned to become a sculptor. The bronze doors of the sacristy of the cathedral at Florence, and the marble frieze of singing-boys for the organ-loft, are monuments of his talent. Like all sculptors, he modelled in clay, and he wished to make his models permanently beautiful. He desired to do that which Vasari says he accomplished, *faceva l'opere di terra quasi eterne*—"made work in clay as it were eternal." He discovered the Saracen art of stanniferous enamel. Probably it was not difficult to discover. Much time has been

lost in discussing where and how he found it. It was no secret. The Saracen potters everywhere—and they were probably as numerous as Saracen towns and colonies—used it. It was as well known among them as the use of lead glaze for *mezza-majolica* in Italy. Any Saracen potter, if asked, "How do your people produce that white enamel so common to all your works?" would have answered at once, "By the use of tin." Italian potters had not wanted the art, and for their general purposes probably regarded it as involving more trouble in painting and finishing than the benefits were worth. To Luca, however, it was precisely the art which he desired, to make white statuary out of clay. His first work in it was placed in the cathedral in Florence in 1438, and was the predecessor of a long line of works of the same class. As he grew old, and had produced some good works in color on flat surfaces, other potters tried the stanniferous enamel occasionally. But none of his contemporaries seem to have liked it, probably because artists were not experienced in painting on it. Nevertheless, here and there in Italy it was practised enough to show that it was widely known before Luca's death.

There is evidently no foundation for a common myth that Luca preserved it a secret, which he communicated only to his nephew Andrea, who, in turn, left it to his four sons, with whom it died. Some of the Della Robbia processes may have been secrets, but at the time of Andrea's death several potteries in Italy were using stanniferous enamel.

Other potters probably learned the art as Luca had learned it. It was not, however, till the beginning of the sixteenth century that it came into general use. Then it afforded to masters in decoration abundant opportunity for superb painting, and during about fifty years the peculiar ceramic art of Italy flourished.

When the stanniferous enamel was introduced, artists of greater ability were led to paint *majolica*. It was at one time supposed that Raphael Sanzio himself painted on pottery, but this was never verified. Battista Franco, Taddeo Zuccaro, Raffaele dal Colle, and other well-known artists made designs for pottery decoration.

The forms in which *majolica* was made are various. Large and small vases, cups, bowls, and other round forms are common. But the finest works of artists are more commonly found on plates or larger dishes, which furnished flat surfaces for their work. One of the most common forms was the drug-vase, for apothecaries' shops, or the *spezieria*. Old Italian palaces had medical establishments attached, and instead of the glass with gilded labels to which we are accustomed, the old drug-store was furnished with pottery jars, more or less ornamented by the *majolica*

painter. Castel-Durante was celebrated for its product of these jars. The form nearly or quite cylindrical, sometimes swelling at top and bottom and rounding in to the foot and to the opening, is known as the *albarello*, or little tree. It represents a section of a tree or large bamboo, and it has been suggested that this name came from the known fact that Oriental drugs were imported in sections of the bamboo, used for boxes or bottles.

Beauty of form was not a characteristic of the Italian wares. Forms which are most graceful in Greek pottery and in metal were used in majolica, but in the thick ware of the Italians are clumsy, and only rescued from positive failure by the decoration. The entire merit of the Italian wares consists in the paintings. It is all wretched pottery. That which is not decorated by good artists is rarely redeemed by the color on it. A large majority of the specimens in cabinets and collections are illustrations of poor pottery and poor daubing. In contrast with these the works of the better artists shine conspicuous in rare and costly examples. Many of the elaborate dishes, on which yellow, green, and blue are lavished in the decoration, show the failure of Italy in attempting to use the Saracen art.

The exquisite interminglings of the same colors on the Damascus wares, the startling effects produced by the bold use of turquoise on grounds of darker blue or lighter green, were never reached by the Italians. This was, in truth, due to the fact that the Italians were superior to the Saracens in drawing and painting. From the fifteenth century Italy excelled in delicate drawing. This is wonderfully illustrated by comparing the methods of reaching success in wood-cuts which were employed by the great creator of German art, Dürer, with the methods used by the early Italian designers on wood. In Germany bold lines left the imagination to fill in the details. In Italy the picture was carefully outlined in slender lines. Dürer's drawing of the human form was rude, forcible, and immensely effective by what we may properly call the roughest style of indication; while the Italians, following in careful drawing the outline of the form and muscles, produced, before the sixteenth century, such statue-like work as we see by the unknown artist of the Polyphilus. The German and the Italian schools reached equally good results; but if Saracen pottery had come to be the foundation of a new art among the Germans, as it was among the Italians, the former would never have made the mistake of attempting to apply the Saracen system of a few bright strong colors to accurate and sharply defined drawing of figures. The Saracens admired the colors and used them

freely, with drawing which had little artistic character except its boldness and unrestrained license. A carnation was a carnation, whether in blue, yellow, red, or black outline. Arabesques flowed in streams over their work, and melted into the ground colors on which they were drawn. Green leaves and purple grapes were pleasant to the eye on dark-blue grounds. Arbitrary rules of harmony of colors, so called, which in these days find fault with nature, and condemn yellow blossoms in green fields as out of taste, had no consideration from the Arabian artist, and hence a glorious freedom. But for the careful and detailed results of portrait or subject painting which the Italians sought to produce, and would have accomplished had they possessed the tools, all the colors of the modern porcelain painter's palette were needed. The stiff contrasts or harmonies of color on their work are often painfully disagreeable. The want of flesh-colors rendered necessary conventional ways of treating faces and undraped bodies, curious enough at times, but only curious, making men, women, gods, and saints alike green, sallow, and sickly. Exceptions to this general rule of disagreeable color are decorations in *grisaille* or in *chiar-oscuro*, which present examples of wonderful beauty. The most delicate and charming effects were produced in gray, creamy white, or other soft shades, in which sirens, dragons, cherubs, masks, and arabesques float or sink into the rich deep ground color. The enamel and glaze heighten their beauty.

The knowledge of the method of producing lustred wares was to ceramic work in Italy as important as the discovery of tin enamel. This was an art fitted to lift the coarse and heavy pastes and colors of Italian pottery into the realms of positive beauty. How good was the taste which led to the placing of this lustre ornamentation on plates decorated with well-executed pictures by able artists is a matter of doubt. The bizarre effect of this intermingling of inconsistent decorations was doubtless pleasing to many, while it is puzzling to our ideas of the age of Raphael and his school. But no doubt can be entertained of the splendor of the lustre itself, and it is this characteristic which marks the Italian majolica as distinct from all other ceramic art in history. When, or in what manner it was obtained from the Saracens, or whether it was an independent discovery, does not appear. The lustred wares of the East or of Spain had been long known and admired in Italy. It first appears on Italian fabrics in an inferior lustre, known now as the *madreperla*, but this disappeared in the improvements made at Gubbio, where Maestro Giorgio produced the gorgeous lustres, surpassing all Saracen dreams of splendor.

The best period of the Italian art in pottery was the first half of the sixteenth century. After 1560 fine work is exceptional. The factories of the Abruzzi, however, continued to produce painted wares of excellent quality down to the eighteenth century; and Del Vecchio and Giustini-ani of Naples may be regarded as about the last of the continuous series of artistic potters in Italy.

Having thus outlined the history of the art in Italy, the products of particular localities and factories must be separately examined.

SGRAFFIATI, GRAFFITI, OR INCISED WARES.—The earliest examples of this decoration are those which we have described among the Phenician pottery, where simple combinations of lines are scratched through the surfaces of black and red wares. In Italian potteries it consists in scratching or incising designs through a surface color, so as to exhibit the underlying color, whether that be artificial or the natural color of the pottery. Scratched lines are among the earliest styles of decoration occurring to savage manufacturers, and are more or less used for really artistic purposes in the best potteries.

In Italy the method was simple, and the results good. The pottery was first baked unglazed, then covered with a thin coating of white clay, usually the marl of Vicenza. This was done by mixing the prepared clay in water to the thickness of cream, and dipping the piece in it. When this coating was dry, designs were scratched in it with an iron point, showing the red pottery in the lines. The whole was covered with a lead glaze slightly colored with iron and copper, and the final baking finished the work.

This form of decoration was one of the earliest in Italy. Early Pisan bacini have been mentioned. Other examples are probably as old as the fourteenth century, and many are undoubtedly of the middle and latter part of the fifteenth. The decoration continued in use throughout the best period of Italian pottery and its decadence, even into the seventeenth century.

The use of the Vicenza earth leads to the belief that some specimens were made near that place in the early periods, but a great portion of the known examples have by some been assigned to Citta di Castello, and by others to La Fratta. Mr. Fortnum speaks of a class of these wares, distinguished by their designs as probably the work of one *bottega*, among which a border of mulberry leaves is general; shields of the "Pavoise" or kite form are found, a sort of florid Gothic character on some of the leafage moulding, costumes of the North of Italy in the fifteenth century, lion supporters, and other details connecting them with North Italian art;

and he is of opinion that they were produced in Lombardy or on the Venetian main-land.

Some highly finished pieces of rich brown color are of the latter part of the seventeenth century, the work of an artist at Pavia, who seems to have been clerical, since on a bowl is inscribed *Presbyter Antonius Maria Cutius Papiensis Prothonotarius Apostolicus fecit.*

Specimens are in a variety of forms, and the incised decoration is often used in conjunction with color painting and relief ornaments of leafage, etc. Cups are supported on feet, around which figures are grouped. Religious and profane legends, rhymes, and proverbs are on them.

FLORENCE.—We have seen that Luca Della Robbia was the first Italian who is known to have used stanniferous enamel. It has been suggested that Saracen potters had before this time established themselves in Italy. It is not impossible or improbable; but no specimens of the work of such potters now exist, and the earliest example of stanniferous enamel made in Italy is the work of Luca Della Robbia at Florence.

The enamel of Luca is by some supposed to have been a peculiar composition which was the "secret" retained in the Della Robbia family; and many think the white on his work peculiar and superior to any other of the period. But the enamels of the Della Robbia ware vary in purity of color, as do those of the various majolica-makers in the sixteenth century. Mr. Fortnum is of opinion, however, that the enamel of Luca shows a greater degree of opacity and solidity. He was, so far as we are now informed, the only person in Italy for a long period of years who used the stanniferous enamel. Few, indeed, used it until after his death (in 1481).

Luca used for decoration at first blue, sparingly applied, then green, maroon, and yellow colors. His white relief figures were often on blue grounds, with a few touches of blue on the figures. His modelling was admirable, and all his works, notwithstanding the quaintness of style, are full of expression and emotion. The faces of his Virgins are often beautiful, and his grouping is invariably effective. The student must always bear in mind, while examining his works, that the art of the sculptor was not far advanced in the fifteenth century. He had renowned predecessors, and he advanced in some respects not only beyond them, but beyond his age.

His works consist chiefly of reliefs for wall or altar use, and also for external ornaments of buildings. His taste was exquisite. His colors were applied with the most judicious effect, never brilliant or gaudy, ex-

cept in work to be seen from a distance and far below. He also painted on plain surfaces, and works of this kind, enamelled, are attributed to him.

Vasari, in his biography of Luca, describes many of his relief works in enamel, concluding with a marble sepulchre of the little brother of the Duke of Calavria, which he executed "with many ornaments of glazed



109. Majolica Vase. Relief work: white on blue; silver-gilt modern handles. (Phillips Coll)

work, assisted by his brother Agostino;" and adds, "After this Luca sought to discover a method of painting figure and history on the flat surface of terra-cotta, to give life to the pictures, and made an experiment in a *tondo* which is above the Tabernacle of four saints on Or S. Michele, on the surface of which he painted, in five compartments, the instruments and insignia of the arts *de' fabbricanti* with very beautiful ornaments. And two other *tondi* he made for the same place; in one, for the apothecary's art, Our Lady; and in the other, for the mercantile business, a lily above a bale of goods, which had around it a festoon of fruit, and foliage of various kinds, so well done as to seem natural and not of painted terra-cotta. He made, too, for M. Benozzo Federighi, Bishop of Fiesole, for the Church of S. Brancazio, a marble tomb, above which was Federigo, recumbent, taken

[*ritratto*] from life, and three other half-length figures. And on the ornaments of the pilasters of this work he painted, on the plain surface, certain festoons with masses of fruit so vivid and natural that with pencil on panel it could not be so well done in oil. And, in fact, this work is marvellous and most rare, Luca having in it done the light and shade so well that it does not seem that by fire [*a fuoco*] this were possible." Vasari goes on to speak of work ("storie e figure dipinte in piano") which Luca left unfinished at his death, of which he saw pieces in his house.

It is evident from these extracts, which we translate from Vasari (Florence edition, 1568), that Luca was a painter on pottery, as well as a sculptor; but it is to be noted that the expression *a fuoco* does not bear out the translation "in vitrified enamel" which has been given to it. It is probable, however, that he did use enamel on plain surfaces, and perhaps was the first Italian so to do. Mr. J. C. Robinson has no doubt of the propriety of assigning to Luca twelve circular medallions each 1 foot

10½ inches in diameter, in enamelled terra-cotta, painted in chiar-oscuro with impersonations of the twelve months.

M. Jacquemart is of opinion that Luca acquired the art of enamelling pottery at Caffagiuolo, where he thinks it was practised before 1438; but this opinion is based on an arbitrary disposition of some specimens of enamelled ware, in which other authorities do not agree with him. Luca died in 1481, leaving, according to Vasari, two brothers, Ottaviano and Agostino, the latter being his assistant before named. It is, however, supposed that this was not a brother, but was Agostino di Antonio di Duccio, who worked at Perugia in 1461, before the death of Luca, where Vasari says he executed in the Church of S. Bernardino three subjects in basso-rilievo and four *figure tonde molto ben condotte e con delicata maniera*.

Andrea Della Robbia, nephew of Luca, born 1457, was heir to the art of his uncle, as sculptor, potter, and painter. Vasari enumerates a long list of his works in marble and in terra-cotta, in Florence. Among the latter are a Circumcision; another and great work, God the Father holding in his arms the crucified Christ, surrounded by a multitude of angels; all the figures in the loggia of the Hospital of St. Paul in Florence, of *terra invetriata*, and many others which Vasari says show the great artistic ability of Andrea. His works resemble those of his uncle, and it is difficult, sometimes impossible, to distinguish them. Some of his reliefs are harder and more stiff and conventional in treatment, and he overloaded his borders with ornament. He executed the same class of work with Luca, and the churches of Italy were enriched with relief ornaments, medallions, altar-pieces, and other objects within, and immense disks, ornamented with colored fruits and flowers in relief built into the external walls. He died in 1528. Andrea left a large family of children, of whom three—Giovanni, Luca, and Girolamo—inherited the artistic character, and produced various works in enamelled pottery, but not equal to those of their father and great-uncle. Vasari says that this Luca did



110. Madonna: Della Robbia ware. White on blue. (T-P. Coll.)

much work in enamel, and mentions by him the pavements of the Loggia of the Vatican at Rome, made under the eye of Raphael. The works of Giovanni are inferior to those of his brothers. Girolamo went to France, where he was employed by the king to decorate the Château de Madrid, near Paris, which work he commenced in 1528, and continued, with an interruption of six years passed in Italy, till his death, which was about 1567. This château was ornamented with much of his enamel, which in 1792 was destroyed with the building, the terra-cottas being sold and ground up for cement.

It has been supposed that other potters in Florence made relief work like that of the Della Robbias, but none is verified as made there.



111. Majolica Painter at Work. (From a Caffaggiuolo dish at South Kensington.)

CAFFAGGIUOLO.—This quiet little village, once a favorite resort of the princes of the house of Medici, who had here a villa or palace, was one of the earliest seats of manufacture of Italian artistic pottery. It does not appear as yet when this establishment first used tin enamel. No dated piece of such ware is known as certainly made here before the sixteenth

century, although many specimens exist which may with reason be considered Caffaggiuolo work of the previous century. No mezza-majolica seems to have been made here. All the wares are enamelled. In the Castellani collection is a plaque in the form of an heraldic shield, with white enamelled ground, on which stands a black cock holding a fleur-de-lis in his beak. Underneath is the date 1466. If this be correctly assigned to Caffaggiuolo, it is the oldest dated specimen, the Cluny Museum in Paris having one dated 1475, and the Sèvres Museum one dated 1477. These specimens, however, although probably correctly assigned, cannot be accepted as without question of this factory. The dates which can be relied on begin with 1507.

The glaze and enamel of Caffaggiuolo are of a pure, even white. The general characteristics of the ware are this pure glaze, and the use of a rich dark blue, very brilliant, used in some cases in masses showing the strokes of the brush. Other colors were brilliant, but not so distinctive, excepting a bright red, which is peculiar. The arms of the Medici family are frequent in the decorations, their emblems and mottoes, and sometimes the letters S P Q F, for *Senatus Populusque Florentinus*.

From the commencement to the end of the first period, the decorators of pottery in Italy used for the ornamental portions of their work the exquisite designs which had been invented and published by the engravers on wood of Italy, France, and Germany. These designs in many cases originated with the illuminators who had preceded the arts of engraving; but in the latter part of the fifteenth and beginning of the sixteenth century books were adorned with beautiful border-work and elaborate initial letters, sometimes so large as to cover nearly half the page of a folio, in which arabesques of every conceivable form were deliciously applied. The dolphins and dragons with human heads which appear in color on majolica plates had been favorite subjects of ornamental letters in books of the fifteenth century. The transition from the Saracen styles of the earlier period to the Italian styles of the finer period was exactly the transition which the illuminators had experienced, who to the interweavings of ribbons and stems and flowers of the Saracen decorations had added grotesques, birds, griffins, and an infinite variety of complicated arabesques, on which the wood-engravers founded a still greater variety of beautiful and inexplicable forms. This is one of the most interesting parts of the study of the pottery decorations of Italy, as it illustrates the relations which the different arts bore to one another at this period of universal revival. The name of the place is spelled on the majolica Cafaggiol, Caffaggiulo, Chaffaggilolo, Gafagizotto.

An interesting dish in the South Kensington Museum, of Caffaggiuolo fabric, was sold in the Bernal sale for one hundred and twenty-five pounds, having been purchased by Mr. Bernal for five pounds from a dealer who had bought it at the Stowe sale for four pounds. It was said to represent "Raphael and the Fornarina," but simply shows the interior of the studio of a majolica artist who is at his work, while two visitors, perhaps a duke and duchess, sit looking on. Some idea may be gathered from the design (Ill. 111) of the manner in which the majolica artists worked.

SIENA.—Quite recently the works of this place have been withdrawn from those of Pesaro, Caffaggiuolo, and Faenza, among which they had been placed. The letters I P occurring in large size on pieces had led to their classification with work of Pesaro. They are now known to be of Siena manufacture. The discovery of another signature on a small plate—*fido i Siena da mo benedetto*—further aided in the selection of specimens, for this plate was evidently by the same hand with some of those bearing the I P. It is supposed that this Maestro Benedetto was both the head of the establishment, and the artist who executed the finest of the work. The examples show a resemblance to the works of Caffaggiuolo. The superior class of the workmanship, and the delicacy of the arabesque and other ornamentations, entitle them to high rank. A dish, illustrated in colors, in the South Kensington Catalogue, presents remarkable resemblance to the style of the illuminators of the previous century.

PISA.—There must have been ancient potteries here. The bacini which are let into the walls of old churches, and which are not Saracen, but Italian work, were probably produced on the spot. Some of these are sgraffiati, others decorated in blue, all coarse and archaic, but interesting as work of the early period. Mr. Fortnum, who has most carefully examined them, has deposited specimens in the South Kensington Museum, which he dates at about 1300 A.D. These are small bowls, cream-white ground, with leaves, zigzags, etc., incised, and colored green and brown. Later, faience was probably made at Pisa, though little is known of it. A vase with serpent handles is inscribed PISA. Some think this a work of Pesaro, and it resembles the fabrics of Caffaggiuolo; but Mr. Fortnum is unwilling to deprive Pisa of this solitary example.

MONTE LUPO made a pottery of red clay, colored deep brown or black, decorated with gilding and oil-paintings in colors. Wares of similar character were made at Castel-Durante. Reliefs and raised work of white or cream clay on the dark ground occur. Marbled or mottled surfaces like stone or shell are also found. *Raffaele Girolamo* signs a cup dated 1639.

Coarse lead-glazed wares with figures in striking costumes are assigned to this place.

URBINO.—In no part of Italy is the history of the best period of the potter's art so interesting as in Urbino, and this because of the general art history of that old city.

The revival, or the birth, of art in Italy was in the fifteenth century. For it is in many respects to be regarded as a first birth in Italy, rather



112. Dish: Charles V, by Orazio Fontana. (Urbino. Castellani Coll.)

than a renaissance. The ancient arts in Italy had been Phenician and Greek rather than Italian. The period when the Malatesta court at Rimini, the Sforza at Pesaro, and the Montefeltro at Urbino alike lent their aid to the cultivation and progress of the fine arts, is full of interest in all departments.

To Federigo da Montefeltro, Duke of Urbino, is perhaps due, as much as to any other person, the development of Italian art. He was a soldier and, for his times, a scholar. He had led no life of inglorious ease. He fought at St. Flaviano in 1460, at Molinella in 1467, at Rimini in 1469. He captured Volterra in 1472, and there took for his sole share of the spoil of the conquered city an old manuscript Hebrew Bible, which he thought worth more than gold, and which he deposited in his library. Encouraging learning and art, he made Urbino, what it was then and

afterward called, the Athens of Italy. Sismondi speaks of him as the Mæcenas of the arts. Italy has always looked to Urbino in his day as the city of the schools of learning. His duchess, Battista Sforza, was his aid and ally in all his good works, whom Tasso has immortalized. He died, a very old man, in 1482, leaving Urbino the artistic centre of Italy.

Raphael Sanzio was born there, in 1483, and brought up, to the age of twenty-one, among the influences which Federigo had created. What the world owes to the old Duke of Urbino can hardly be overestimated. Nor did the glory of Urbino fade with the death of Federigo. Guid' Ubaldo, his son, educated by his mother and by the masters whom his father had gathered, was his worthy successor, and continued to be the steadfast patron of the arts. His wife, Elizabetta Gonzaga, was renowned for her beauty, purity, and accomplishments. So celebrated was she, and so well known in England, that it has been suggested by Sir Charles Eastlake that Shakspeare had her in mind when he makes the Prince address Miranda:

"For several virtues
Have I liked several women; never any
With so full soul but some defect in her
Did quarrel with the noblest grace she ow'd,
And put it to the foil: but you, O you,
So perfect and so peerless, are created
Of every creature's best."

The art history of Urbino under the reign of Guid' Ubaldo I. is full of importance. He died in 1508, and was succeeded by Francesco Maria della Rovere, whose relationship to the pope (his uncle) enabled him to send Raphael to Rome. On his death, in 1538, Guid' Ubaldo II. succeeded him, and became the patron of the great artists in majolica throughout his duchy.



113. Pilgrim Bottle, painted by Orazio Fontana. (Urbino.)

It is not probable that painted pottery was made at Urbino as early as at other cities which were or became parts of the duchy. The four great seats of the work in the time of Guid' Ubaldo II. were Pesaro, Gubbio, Castel-Durante, and Urbino. The products of these factories made Urbino renowned in the art, and the city itself became, in the sixteenth century, the residence of artists whose work gives, perhaps, the greatest fame to majolica painting.

The first of the Urbino artists of whom we have any definite knowl-

edge was Nicola. He worked very shortly after the year 1500, and his paintings are now very highly prized. The earliest pieces of Urbino fabrication are by him, in a service known as the Gonzaga-Este service, made while Isabella d' Este was living and after her marriage, therefore between 1490 and 1539.

The manner of Nicola da Urbino, says Mr. Fortnum, "is remarkable for a sharp and careful outline of the figures; the features clearly defined, but with much delicacy of touch; the eyes, mouth, and nostrils denoted by a clear black spot; the faces oval, derived from the Greek model; a free use of yellow and a pale green; a tightening of the ankle and a peculiar rounding of the knee; the hair and beard of the older heads heightened with white; the architecture bright and distinct; the landscape background somewhat carefully rendered in dark blue against a golden sky; and, lastly, the stems of the trees, strangely tortuous, are colored brown, strongly marked with black lines, as also are the rolled-up clouds: these are treated in a manner not very true to nature."

Many artists worked at Urbino in the best period following Nicola, and contemporary with him, and a large proportion of the majolica ware now preserved was made and painted here.

The Fontana family removed to Urbino from Castel-Durante, but at what date does not appear. Their name was formerly Pellipario, and "Guido Niccolai Pellipario, figulo da Durante," was certainly in Urbino in 1520. They were both potters and painters. Mr. Robinson's opinion (Soulages Catalogue, Appendix B) is that Nicola Pellipario had a son Guido, who had three sons, Camillo, Orazio, Nicola second, and that Camillo had a son, Guido Flaminio, all of whom are of the Fontana family of artists. Nicola is by some supposed identical with the Nicola da Urbino before named. The family continued work from father to son, until the seventeenth century.

In the Fountaine collection is a vase signed *Fatto in Urbino in bottega di M. Guido Fontana Vasaro*. Other works are marked *Fate in bottega di Oratio Fontana*. Orazio worked with Guido, his father, up to 1565, when he established a separate bottega. Camillo is said to have gone to Florence or to Ferrara, and returned to Urbino, where he died in 1605. The existence of a potter and artist whose signature is Guido Durantino has led to a discussion of his probable identity with Guido Fontana, the father, which is now generally believed to be the fact.

Signed work from the Urbino botegas may of course be classified; but as a large majority of the pieces are not signed, they can be attributed to their makers only by careful examination and comparison. There were

evidently other unknown artists employed in the works, who decorated pieces wholly or in part. The work of Orazio Fontana is perhaps more highly esteemed than that of any other artist. No written description can assist the student in understanding its peculiar merit or characteristics. His figures are drawn with spirit and freedom, and perhaps it may be said that in looking at his best works one forgets, more readily than in examining any others, the defective color and green or yellow look which so often offends the most cultivated taste which has not been educated to the majolica decorations.

The dish with a portrait of Charles V. (Ill. 112) is, however, an exceptionally fine work, on which any eye would repose with content and admiration. The emperor wears a blue velvet cap and vest with a purple coat; his order of the Golden Fleece, in yellow, hangs from his neck. The curtain at his left is a deep green, and the pillar at his right a brilliant blue. The flesh-tints are in pale yellow, the palette of the majolica artists not furnishing them with more appropriate flesh-colors; but even on this the blue eyes have a life and light rarely seen in faience painting.

While Orazio has been called the Rubens of majolica painters, another Urbino artist rivals him in fame. Francesco Xanto came from Rovigo to Urbino, and has left his name or X on many pieces of his work, by which alone we know him. His full name was Francesco Xanto Avelli, to which he added, as was customary, the place of his birth—"da Rovigo." He produced a great amount of work, much of which was sent to Gubbio to be finished with the lustre of Giorgio. Opinions concerning him differ. Mr. Robinson says of him, he "had a talent for the arrangement of his works in composition, nearly all his subjects being 'pasticci;' the various figures or groups introduced being the invention of other artists copied with adroit variations over and over again, and made to do duty in widely different characters. * * * His designs are generally from classical or mythological subjects. Xanto's execution, although dexterous, is monotonous and mechanical. His scale of coloring is crude and positive, full of violent oppositions; the only merit, if merit it be, being that of a certain force and brightness of aspect: in every other respect his coloring is commonplace, not to say disagreeable even."

We have quoted Mr. Robinson thus, for the sake of illustrating to our readers the fact, always to be borne in mind in reading works on art, that standards of excellence are often arbitrary. In no respect are they more so than in discussing the majolica paintings of Italy. A comparatively small number of persons have devoted attention to the subject, and very few lovers of art are attracted to this queer and *sui generis* department.

Hence the standards of merit are not established, as in sculpture and painting, by the verdict of the art-loving world, but only by a few students, who, each for himself, has determined what work best pleases him. This is natural and necessary. The majolica painting cannot be compared with any other, not even with modern faience painting. The colors possessed by the artists were few, and they were compelled to produce the best results they could with these. In chiar-oscuro decorations, they came into the field of the painters in fresco and oil, and may be compared with them. In color painting, they pursued their own ways of making what they thought beautiful, and it must be frankly confessed, judging from our standards, the best of them succeeded very rarely. This it is that gives high value to the limited number of successful examples. But the reader who has not studied the works themselves must bear in mind that this was an art of painting which has no parallelism with that art which, at this same time, had its grandest triumphs from the pencils of Albert Durer in Germany and Raphael Sanzio in Italy. Originality is not a special characteristic of any of the majolica painters. Their business was to make pottery for sale. They compelled to their uses the designs of other artists, notably of the German and Italian engravers of their own and preceding periods. The potters who employed them, or the artist-potters themselves, desired chiefly success as merchants, not as painters. Xanto's work was evidently exceedingly popular in his day, and, whatever made it so, it is noteworthy that many lovers of art, who have not been accustomed to the study of majolica, are now more attracted to his works in general than to those of any other majolica painter. Mr. Marryat, whose standard is probably his own, says of Xanto: "His drawing is very correct, his coloring rich, his carnations yellowish, heightened with bianchetto; the hair of his ladies light, often composed of plaits fastened in front; the foliage of the trees executed in a bluish green, with the lights of a pale green, and the trunks black hatched with yellow, which produce a very good effect. * * * The vestments are generally blue or yellow, varied with a purplish or violet color, and there is invariably some garment of the greenish blue."

Both the gentlemen quoted are high authorities, and thorough students of the art.

Xanto often copied engravings after Raphael by Marc Antonio and other engravers. The subjects were mostly from ancient history and mythology. He signed in various ways, usually with some such abbreviation of his name as *F. X. A. R.*, or *Fra. Xanto Av. Ro.*, or *F. Xanto A. da Rovigo*. His latest dated work is 1542.

Among the products of Urbino are a large class of specimens ornamented with grotesques, chimæras, etc., introduced in graceful arabesques, or scattered over the surfaces of pieces. This style was afterward much used in the work of Rome. It was also copied at Ferrara. It differs entirely from that style known as a *candeliere*, used also at Urbino, Castel-Durante, and other factories.

Battista Franco made designs for the use of painters on majolica; but it is not certain that, as Passeri states, he painted on the pottery himself. Many of the artists of the Italian schools may have been interested in the majolica painters and their work, and it is possible that they occasionally amused themselves with trying their hands at the art. But if they did, they probably produced wretched results. The experience of long practice was needed to enable any one to paint on pottery a picture which would look well after baking. The fact that many of Raphael's works, engraved by Marc Antonio, are found copied on pottery, led to the erroneous idea that the great artist himself painted pottery. The common name, Raffaella ware, was given to Italian potteries in England before they had become subjects of study.

The Urbino potteries produced ware throughout the sixteenth century, and in the early part of the seventeenth. Francesco Durantino signs some work in 1544: perhaps he was a potter. A dish is in the Louvre signed *Ne 1551 fato in botega de Guido Merlino*, but there is little information concerning this Guido. Cæsare da Faenza worked in 1536. Other names of artists or potters are recorded, but they are unimportant. Xanto seems to have painted for a potter named Francesco Silvano, as indicated by the signature on a plate, one of Xanto's finest works representing the Storming of Goleta, formerly in the Marryat collection.

Giorgio Picchi the younger, from Castel-Durante, painted at Urbino cupids among clouds.

The Patanazzis, of a noble family, were artists of the later period in Urbino, and excellent painters. Alfonzo Patanazzi signed ALF. P. F URBINI 1606. Vicenzio, last known of the family, was a child when he began work. Passeri cites a piece signed by him, in 1620, *di eta d'anni tredeci*.

A remarkable collection of majolica is in Loretto, belonging to the Santa Casa. It consists of three hundred and eighty-five medicine jars and vases which belonged to the spezieria of the palace of the dukes at Urbino. Probably many of these were made at Castel-Durante, and some assign them chiefly to that place. The finer among them are the work of the Fontana botega. After the death of the Duke Francesco

Maria, in 1631, this collection was presented to the Holy House. They are arranged in two rooms, and on them are paintings of scenes sacred and profane. On eighty-five of them are children playing games. A grand duke of Tuscany once offered for these jars an equal number of silver vases of equal weight, and Louis XIV. is said to have offered for five of them, painted with the Four Evangelists and St. Paul, five golden statues of the same persons. Battista Franco and Raffaello Colle made the designs for many of these, and Orazio Fontana painted them.



114. Dish: The Judgment of Paris, by Patanazzi. (Urbino. Castellani Coll.)

After the days of the Patanazzi the art in Urbino utterly decayed. On the whole, it may be said with some assurance that it never had the qualities of a permanent art. It was peculiar to an age and a people, and when the age changed it was no longer to the taste of the people. Long afterward, in 1773, we find a lamp in pottery which an inscription states to be of the "fabric of fine majolica of Monsieur Rolet in Urbino, 28 April 1773." A Frenchman established a pottery where Orazio and Xanto had worked, but whether he succeeded or failed we know not. He seems to have made wares in the modern styles of Moustiers, in France, and perhaps of other works.

PESARO.—The Duchy of Urbino included within its territories four of the most celebrated of the majolica factories—Pesaro, Castel-Durante,

Gubbio, and Urbino. The history of the potter's art in these places goes back to the Roman period. In Pesaro there were probably potteries where wares more or less rude or artistic have been made with little interruption from the periods of antiquity. Some of the earliest fabrics of modern times, built into the walls of churches, and other extremely early pieces, were produced here.

Passeri, a resident of Pesaro, writing in the middle of the last century, his "*Istoria delle Pitture in Maiolica fatte in Pesaro e in Luoghi Circconvicini*," gives the most important historical notices now extant of the art in his ancestral city. He traces the potter's art there from the Roman times down to his own, in 1752, with a long mediæval break in the succession. There is no reason to doubt that painted wares with lead glaze were made here at an early date. Churches were decorated with glazed bacini in the fourteenth century. Mezza-majolica was largely produced here in the sixteenth century, and probably in the fifteenth. Passeri speaks of a plate with a picture of Horatius Cocles, on which was inscribed "made in Pesaro, 1451." No other dated specimen is known prior to 1540, at which time the enamelled, lustred, and painted majolica was made in greatest perfection in the same duchy.

The earliest dated piece of Pesaro work now known is in the possession of Mr. Fortnum, who says, "It is a fruit dish, on which is painted the creation of animals by the Almighty, who, moving in the midst, is surrounded by animals rising out of the ground; a distant landscape with a town (!) on the side of a steep mountain forms the background." The legend written on the back is not very clear, but is the title of the picture, which is perhaps intended to illustrate the passage in St. John's Gospel, "By him all things were made." It seems to be *Chri*vit* animallis Christtus fatto in pesaro*. We have placed stars in place of two doubtful letters. Mr. Fortnum reads the word *Chrianite*.

The majolica artists were in general poor writers and worse orthographers. Their inscriptions are often illegible, and when legible are frequently misspelled.

Passeri is the authority for assigning to Pesaro early works with the lustre known as madreperla. This claim has been disputed by some, in favor of Gubbio or Diruta; but while the question is involved in some uncertainty, there is nothing to disprove the evidence of Passeri, a resident of Pesaro a hundred years ago, with means of knowledge which we may not possess. He says that about 1450 the glaze began to improve, when pieces were produced decorated with arabesque borders enclosing arms, portraits, and heads, outlined with manganese and colored with

madreperla lustre, leaving the faces white, and that it was not till about 1500 that the finer work on stanniferous enamel was begun.

Dishes are known with the mark *In la botega di Maestro Girolamo da la Gabice in Pesaro*, and others *In botega di Maestro Gironamo* 1542, both, as Passeri states, by the same maker. There is a piece dated 1550 with the inscription, "Made in the bottega of Master Baldagsar Vasaro of Pesaro, by the hand of Terenzio son of Master Matteo *boccalaro*." These are the only names known of artists or potters at Pesaro, although the number of its products was very large. In 1567, at the beginning of the decline of the art, the Duke Guid' Ubaldo II. granted a license to Giacomo Lanfranco, who had begun to place gilding on pottery. It is not certain that any pieces of this ware exist, though M. Jacquemart confidently regards as such a baptismal shell, with chimera head, enamelled with blue on which are broad touches of brilliant gold, and other pieces, among which are some with papal and other arms, and others with arabesques in gold and white.

Before 1500 Pesaro produced in *mezza-majolica* pieces with ornaments in relief, borders of fruit in the yellow lustre on white ground, and with the ordinary centres, heads, portraits, arms, and saints.

Passeri claims for one artist, now unknown, at Pesaro the execution of a class of dishes regarded as the best works in *mezza-majolica*. These are thick, heavy dishes, large, the projection around the foot perforated with two holes for a string by which to hang them, glazed yellow on the back, decorated with half-length portraits of princes before 1500. Rims are bordered with imbricated, checkered, or striped patterns, colors are yellow, and the lustre is iridescent. Mr. Marryat doubts the propriety of assigning them to one artist and period, and regards the description as a general characteristic of *majolica* at the beginning of the sixteenth century. It is interesting to remark that here, as in Delft and other modern works, we find the same perforations for the same purpose which we found in Phenician work two thousand years earlier.

In 1474, Pope Sixtus IV. wrote to Costanzo Sforza, Lord of Pesaro, thanking him for a present of earthen vases. Lorenzo de' Medici also wrote to Robert Malatesta, of Pesaro, thanking him for like pieces, and says, "They please me entirely by their perfection and rarity, being quite novelties in these parts, and are valued more than if silver, the donor's arms serving daily to recall their origin." The novelty was probably the lustre, which was then unknown at Florence.

The art declined at Pesaro, as elsewhere in Italy, after 1560. Passeri ascribes its decay in part to what he thought very bad taste—a preva-

lent taste, however, in later times—the admiration of Chinese porcelain which had begun to come into Italy. But Pesaro continued to make pottery down to the present century. In 1718 there was only one potter there, Alfonzo Marzi. In 1757, Giuseppe Bertolucci and Francesco di Fattori established a pottery, but its existence was short. In 1763, another was established by Antonio Casali, Filippo Antonio Caligari, and Pietro Lei da Sassuolo, the latter an artist on pottery from Modena, and this establishment produced excellent work in modern styles.

CASTEL-DURANTE.—It is probable that painted wares were made here as early as the thirteenth century. The early works, lead-glazed mezzamajolica, were coarse, painted with arms and half-figures, the flesh white, and the dresses gaudy. Enamelled ware was made quite early, possibly before 1500. The factory reached its highest period about 1525–'30, made good work till 1580, and continued producing wares in the next century.



115. Dish: Flight into Egypt. (Castel-Durante, 1526.
Castellani Coll.)

Although Piccolpassi resided here, whose work on the general art affords much detailed information, we are left in comparative ignorance of the artists of Castel-Durante. Yet it was the mother of the great artists, the Fontanas, who went hence to Urbino, and "from Durante" was the title of artists in Venice, Rome, and in France. Signor Rafaelli suggests that many wares known as from Urbino were only from

that duchy, and may have been from Castel-Durante. Its products were not inferior to those of any other bottega in Italy. The earliest known piece is a bowl, the ground a rich dark blue, the decoration grotesques, among which are the arms of the Rovere family, over them the papal tiara and keys, trophies of books, festoons of drapery, and a boy-angel holding the Veronica, or handkerchief with the Saviour's face. On two labels is inscribed *Iu. II. Pon. Max. Tu. es. sacerdos. i eter.* It was made for Pope Julius II. Mr. Robinson says, "In the design and execution of the painting, splendor of color, and perfection of enamel glaze, this magnificent piece is a triumph of the art."

Castel-Durante wares, as well as those of Urbino, Faenza, Gubbio, and other factories, are often decorated with the forms of monsters, dolphins, dragons with human heads, sea-horses, masks, and other devices, executed with great freedom of drawing. When these are arranged in symmetrical patterns with foliations, the decoration is called a *candeliere*, and it is common to call the objects themselves *candelieri*. This peculiar decoration was a remarkable growth. It came from a union of many styles, of the widest divergence and far separate places of origin. Persia and Pompeii, Rome, Damascus, and mediæval Europe, all contributed. The adaptation was not original with the majolica painters. The same general designs had been favorites with engravers from the fifteenth century, continuing in the sixteenth; and the fine issues of the printing-presses of Germany, France, and Italy abounded in examples which the majolica decorators eagerly seized upon as admirably adapted to their purposes. They had been used in illuminations and in metal work. But nowhere are they so striking as in engravings, where they appear in white on black, such as the works of Urse Graff, at Basle, or so beautiful as on the majolica in grisaille, or in chiar-oscuro on dark-blue grounds. The triumphs of the majolica paintings are in these decorations, which require no special education in Italian pottery to be appreciated and admired by all lovers of art. No defects of color mar their beauty.

Many of the pharmacy jars found in collections are attributed to Castel-Durante. The paste of the wares is of a pale-buff color, and the glaze rich and pure. Most of the dishes, whose sole decoration is a large portrait, are supposed to be of this fabric, but this is not certain. Mr. Fortnum thinks many of the pieces ornamented with oak branches, yellow on blue ground, and sometimes in relief, surrounding a small medallion central portrait or head, are also of Castel-Durante. Of the fine specimens in the Santa Casa at Loretto, a large number are attributed to this fabric, as is also the making of cups from the dust swept up in the Holy House.

GUBBIO.—The interest attaching to the work of Gubbio centres wholly on the Master Giorgio Andreoli and the gorgeous fabrics in lustre which he produced. He was a gentleman of Pavia, who came to Gubbio about 1485.

We have already seen that Passeri claimed for Pesaro works in the madreperla lustre, and that others ascribed them to Diruta. The lustres of Giorgio were another affair from the madreperla, though possibly a growth out of that. They are as brilliant as gems, the ruby not a ruby color, but varying in shades from deep claret towards the ruby, gleaming with more than the splendor of polished stones; the silver giving superb

effects like moonlight on white water; the green, rarest of all and most gem-like of all; the gold and the half shades of various tints always superb.

Giorgio had done some work in relief in the style of the Della Robbia; but when or how he became possessed of the secret of these lustres is unknown. Passeri says he brought the ruby lustre with him from Pavia to Gubbio. In the South Kensington Museum is a St. Sebastian in relief, attributed to him, but not signed, lustred with gold and ruby, dated 1501. He probably painted on majolica also scrolls, trophies, flowers, and



116. Dish: Chiar-oscuro. (Castel-Durante. Castellani Coll.)

foliage, grotesques, and ornamental arabesques, which he heightened with lustre, giving gorgeous effects.

It is now generally supposed that he learned the art of lustre from an unknown predecessor. The South Kensington Museum has three dishes whose lustre is fine, even superior in the gold to that of Giorgio, which, Mr. Robinson thinks, are by this unknown predecessor. The blue color used by this unknown artist has peculiar strength, and is a full dark indigo, by which his work is distinguished.

Mr. Robinson, in studying the Soulages collection, arrived at these conclusions in regard to the work of Giorgio:

1. That he did not invent the ruby lustre, but succeeded to and monopolized the use of a pigment used by an earlier artist of Gubbio.

2. That the signed works were really painted by several distinct hands.

3. That his own work may be distinguished with approximate certainty.

4. That probably nearly all the "istoriate" pieces (1530-'50) of Urbino, Castel-Durante, or other fabrics, enriched with lustre, were so decorated by a subsequent operation, at the Giorgio bottega.

5. Consequently, the use of lustre colors was mainly confined to Gubbio, where painted wares by Xanto and other artists working at Urbino and other places were sent to be lustred.

These conclusions, especially the second, and the various character of wares signed by him, indicate that Giorgio became the proprietor or head of a considerable establishment, at which the work of placing lustre on wares was carried on, nominally by him; that this establishment employed artists, and produced painted and lustred work, on which Giorgio placed his name, as he had right to do. But the fact that his name is on a piece does not imply that he painted or lustred it. The painting, if any, of his own hands must be judged by the characteristics. It is not impossible that it was the practice of his establishment to buy, from other potteries or from artists, painted majolica, to be lustred and sold from the Gubbio factory. Pieces are known which have the mark of Giorgio, with the mercantile sign of trade added. The factory may have used such a sign on goods made for the public market. In the Castellani collection are two well-painted dishes, which have such a peculiar, unfinished look in large spaces, that we have no doubt they were intended to be finished with lustre, but never received it.

Signed work of Maestro Giorgio is known from 1519 onward. His best pieces were generally signed *Maestro Giorgio da Ugubio* with the date, but he used various short forms of signature. The piece of his work which has the highest reputation is a dish signed and dated 1525. The subject is a group of fifteen female figures bathing in a forest, a city in the distance. It has been called *Diana and her Nymphs*, but is rather more modern in intent. The bath has a marble front, with winged cherubs and grotesque heads lustred. The painting is not remarkable, but the border is very fine—dragons and serpents with human heads, trophies, cornucopiæ, ribbons and foliage winding in a fine arabesque, on which the richest lustre is expended. This specimen, lately in the possession of the Baronne de Parpart, in Switzerland, is said to have been sold recently for eight hundred and eighty pounds—in round numbers, four

thousand five hundred dollars. Another large dish, signed in full, and dated October 20th, 1520, is without border ornament, the subject—the Judgment of Paris—covering the entire surface. The trunks of large trees sweep across the dish with a bold effect. The colors are chiefly blue and green, with deep red in the slight draperies of the figures. The lustre on this piece, as on many others, is laid on in dashes here and there, scattered like moss on the ground, roughly lined on the trunks of trees, and so disposed, in general, as to produce a bizarre effect, not at all admirable, but certainly odd. A large dish in the Fountaine collection



117. Dish. (Castel-Durante. Castellani Coll.)

signed *Mo G* 1525 has also no border work, but the three Graces, standing under palm-trees, cover the entire field. A dish, with Hercules and Antæus, in the Castellani collection (Ill. 120), is one of the finest specimens of Maestro Giorgio.

This artist was living in 1552, but his latest dated works are in 1537. A piece dated 1541 has been mentioned, but its existence is not certain. His son Vincenzio probably succeeded to the management of the work. Pieces are known signed with the letter N in various forms, which Mr. Robinson suggests includes the letters V I N, and may be the monogram of Vincenzio, who was known as Maestro Cencio. Brancaleoni says he worked with his father till 1536. Mr. Fortnum is of opinion that al-

though Giorgio may have occasionally applied the lustre pigments with his brush to pieces painted by artists at other places, the majority of these were executed by his son or assistants, and that this practice did not begin till 1525.

Mr. Robinson describes two small Gubbio cups, with figures in relief, on which is a pale-yellow lustre, outlined with blue on white ground. A bas-relief in the Louvre, the Virgin and Child, lustred, is signed with a C. and below it *Perestinus*. Other lustred pieces are signed with a simple P. A piece dated 1557, subject Venus and Cupid, is signed *In Gubbio per mano di Maestro Prestino*. All these are supposed to be from the hand or shop of Maestro Prestino, dated pieces being from 1530 to 1537. Mr. Robinson says, "The works of this master are interesting as exhibiting a return to the style of the early Gothic masters of the sixteenth century, the iridescent lustre being identical with that of the painters of the bacili amatoria pieces. It is possible that Maestro Prestino's fabric produced the coarse late specimens, enriched with the yellow lustre, frequently occurring. He is, at any rate, the most recent master hitherto identified using the lustre colors."

Piccolpassi professes to explain how the lustres were produced. He gives the pigment, as he learned it from Maestro Vincenzo of Gubbio, as terra rossa 3, bolo arminio 1, feretto di Spagna 2; and another pigment, terra rossa 6, feretto di Spagna 3, cinabrio 3, adding a "carlino" of silver. A peculiar furnace was built in which the pieces after being baked were to be lustred. This process was done by exposing them to the smoke of burning fagots of wood and broom. The carbon of the smoke combining with the metallic ingredients of the pigments left the brilliant lustre in a thin surface on the pottery. Piccolpassi says that the process was expensive, for sometimes only five or six pieces in a hundred were successful.

This statement, however, must be regarded as too sweeping. It is not probable, if the risk of failure were so great, that the Gubbio factory would have received, as they did, the finished works of eminent artists in other places, to be subjected to a process which would be successful only by chances so very small. There was doubtless very great certainty in the work which was applied to the paintings of Xanto without injuring them, and without producing, so far as we know from examples, any semi-successful or doubtful results.

The art of making the lustre was lost, or ceased to be popular, soon after the first half of the sixteenth century. From 1560 to 1570 it declined, and soon disappeared. It has been sought in modern times, with

much labor and little success. Luigi Carocci, a chemist of Gubbio, is said to have approximated nearly to the old work. Mr. James De Morgan, in London, has within the past two years produced some superb specimens of the gold and ruby lustre, often fully equalling the old Gubbio, and a silver or opalescent lustre which is exceedingly fine, and in many specimens not inferior to the best Saracen and Italian works.

PERUGIA.—The old name Peroschia occurs on an oval cistern in the Fountaine collection, painted with subjects after Giulio Romano, and dated 1553. At Citta di Castello, near Perugia, early ware was made, and much of the sgraffiato ware has been assigned to it.

ST. QUIRICO.—Terchi, of Bassano, established or found a factory here about 1714, which was the property of Cardinal Chigi. Mr. Fortnum says the wares were only made for presents. M. Jacquemart says Piezzentile, a painter, was first director, Bartolomeo Terchi the next, and Ferd. Maria Campani, of Siena, was a painter.

BORGO SAN SEPOLOCHRO.—Giovanni Battista Mercati, a native of this place, a painter of some note, whose etchings are known and prized, signs a plate painted with a stag hunt, blue on white, dated 1649. A lamp



118. Gubbio Lustred Dish. (Castellani Coll.)

is known dated 1771, and signed *Mart. Roletus fecit*, with the name of the place. We have met Monsieur Rolet also at Urbino in 1773.

FAENZA.—There is doubt whether the French and English languages derived their word *faience* from this place. There is a French town, *Faïence*, which once made pottery. It may have come from that; and other derivations are suggested. In French, *faïence* formerly implied all kinds of pottery and porcelain. Its meaning is now more limited. In English it includes all decorated pottery except porcelain and majolica. But the original meaning of majolica is not determined. Mr. Fortnum proposes to confine it to lustred wares as its original signification; but the idea that this was its original meaning is chiefly based on Scaliger's statement, and Scaliger's testimony is not clear, as we have seen heretofore.

As early as 1455 Faenza made "white and brilliant" wares. Piccolpassi, a Durantine potter himself, in the day of the best work, 1548 A.D., gives to Faenza the highest rank in vases. It was an ancient seat of the potter's art, and its products were large and widely scattered. Much doubt exists as to the earliest dated specimens. The 1475 plaque in the Hôtel de Cluny, assigned to Caffagiuolo, is by some assigned to Faenza. A service of seventeen pieces in the Correr Museum, at Venice, signed *Salomone* 1482, is assigned to Faenza. Pavement tiles in a chapel of the church of St. Petronio, at Bologna, of date 1487, signed (as Signor Frati, of Bologna, reads it) *Bologniesus Betini fecit*, are assigned to Faenza, the word *Faventzie* frequently occurring on them, and a label bearing *Petrus Andre Defave*. This pavement is well painted, with trophies, animals, heads, the keys of St. Peter, and other devices. Among the wares of Faenza none are more important than those known as of the Casa Pirola, of which the distinctive mark is a circle crossed with two lines, or a crescent so crossed, or both combined. Other marks are on pieces which are evidently of the same fabric. The grounds are blue, and the borders are in shaded white, grotesques and arabesques. These wares are exceedingly beautiful, and of a class wholly distinct from the green and yellow wares of the Urbino and other potteries. The blue grounds are rich in tone; the decorations, largely derived from the illuminations and wood-cut ornaments of this and the preceding periods, are admirably executed and effective. The centres have various subjects, and the work of several artists is evident in them. They are of the early part of the sixteenth century. One of the painters is commonly known as the "green man," an excellent artist, signing B. B. F. F. Another artist used the same signature.

There are fine works of an artist who signs *Baldasara Manara* (his dishes have yellow backs with red lines), and also of the painter of the service in the Correr Museum, perhaps the same who signs other pieces F. R.

A great variety of works were produced. Drug or pharmacy jars decorated with bright blue and yellow, with medallion heads or other designs on the sides, are frequent, on some of which the name *Faenza* leaves no doubt of their origin. The generally characteristic feature of the products is the dark-blue ground, which is richer in tone than that of any other fabric.



119. Boccia of Gubbio; lustred.
(Castellani Coll.)

Decorations in dark blue on lighter blue are common, in the "berretino" style. The backs of the plates are also decorated in yellow and blue with circles, scrolls, and marks of color. Bas-reliefs were made at an early period.

Some of the wares of Faenza had not the distinctive characteristics, and cannot be separated from other works.

The manufacture passed into decadence in the latter part of the sixteenth century. Coarse and common wares seem to have been made at a later period, and there is a modern fabric at Faenza which reproduces the old work.

RAVENNA.—A plate with bluish-gray enamel, painted in blue camaieu with Amphion borne by dolphins, is mentioned by M. Jacquemart as bearing the name *Ravena*. Another plate with a mark including the letters R. V. A., is assigned to the same place.

FORLÌ.—In the last years of the fifteenth and first of the sixteenth century there was a factory of excellent majolica here, supposed to have been of one Maestro Jeronimo, whose name is on fine dishes, the decorations of which show some lingering love of Saracenic styles. Piccolpassi refers to the painted majolica of Forlì, and it was doubtless esteemed.

RIMINI.—All the majolica known of this place is dated 1535. The number of specimens is not great, and most of these are perhaps of one service. On a plate in the Hôtel Cluny are Adam and Eve; on one in the British Museum, The Fall of Phaeton. The work is of a good character of painting, with strong contrasts of color, free drawing, and the glaze is remarkably fine, so rich as to be a characteristic. A jug, in the University Museum at Bologna, is signed *Giulio da Urbino in bottega di Mo Alessandro in Arimin*.

ROME.—Diomedè, of Castel-Durante, came to Rome, and established works. A vase is known with the name of Paolo Savino, in 1600, and an inscription on another states that it was made in the shop of M. Diomedè Durante in Rome. Their decoration is in grotesques in yellow and blue on white ground, in Urbino fashion. Giovanni Volpato established a pottery in 1790, at which he produced potteries and porcelains, including *terraglia verniciata*, which was a sort of queen's-ware like the English, and some of it remarkably good. Statuettes, figures, and various objects were made in this ware. Occasionally these pieces are marked G. VOLPATO ROMA, impressed in the clay.

DIRUTA.—Here, Passeri says, was made a beautiful ware. The earliest specimen, dated 1525, resembles Faenza ware, with grotesques on blue ground. The only known artist signs a piece, now in the Louvre (the

subject from "Orlando Furioso"), *i deruta El frate pensit*, 1545. He is not a remarkable painter. But fine work is assigned to Diruta in various styles, it does not appear on what authority. Some early specimens with a golden lustre are inscribed *in Diruta*. From this it was once argued that all the pieces with madreperla lustre were made at Diruta, an argument without force. The assignment of many of these works may be considered as still doubtful.

FABRIANO.—A single fine work dated at Fabriano, 1527, and signed with a mark like X, is the only evidence of a fabric here. This plate was sold at auction in London for one hundred and fourteen pounds. Another from the same fabric was sold at the same sale; and yet another is known with the mark of the artist as on the first mentioned. All are good works, the one a picture of the Madonna della Scala, after Marc Antonio's engraving from Raphael; another, The Rape of Proserpine.



120. Gubbio Dish: Hercules and Antæus, by Maestro Giorgio. (Castellani Coll.)

VITERBO.—Rough work is known of this place; and *Diomeo*, an artist's name, in 1544.

LOBETTO.—We have spoken of the treasure of Urbino and Castel-Durante wares in the Casa Santa. They used to sweep up here the accumulated dust and dirt on the floor of the house, work it in with clay to make small cups and bowls, and inscribe them outside CON. POL. DI. S. CASA (with

dust of the Holy House). These had paintings of the Virgin and Child. Holy water was sometimes mingled with the dust, in which cases *ET AQUA* was added after *CON. POL.* Possibly these were made at Castel-Durante.

VENICE.—Although it has been conjectured that Venice produced pottery in the fifteenth century, nothing is known of its work until 1540, and even then some doubt exists as to the correct assignment of a fine dish so dated. A large dish, dated 1546, and inscribed “made in Venice,” exhibits the Destruction of Troy, painted in Urbino style. Another dish—subject, Moses before Pharaoh—is inscribed 1568 *ZENER DOMENIGO DA VENEZIA FEOI IN LA BOTEGA AL PONTE SITO DEL ANDAR A SAN POLO*. On the reverse of this dish is a fine border on blue ground. Later pieces are known by Dionigi Marini, dated 1636. The earlier wares have a gray surface, on which the design is executed in blue and white. Ornaments on the reverses are general.

In the seventeenth century Venice produced thin and light ware, very sonorous, with ornaments in relief, fruits and flowers around the rim, the colors generally blue and brown, with yellow on white or pale-blue ground. These were sometimes mistaken for enamelled metal. They are attributed to the Bertolini who obtained a favorable charter from the senate in 1753.

TREVISO.—A dish with a curious picture of The Sermon on the Mount has a circular mark, stating that it was made at Treviso, 1538. More modern works are white, with reliefs, blue, green, violet, and yellow, or decorated with flowers. Sgraffiati wares of poor character were made in the last century.

CORNARO.—Dishes are described, of grayish-blue decoration, the mark the shield of the Cornari family.

BASSANO.—Simone Marinoni founded a pottery here about 1540, which produced no work of importance until the brothers Bartolomeo and Antonio Terchi took it about 1600, and made some good faience for a few years. The mark of the crown, Mr. Chaffers tells us, is not distinctive of Bassano, as he finds it on other ware. Sir William Drake says (“Venetian Ceramics,” p. 4) that a plate of 1595 exists signed S. M., for Simone Marinoni. He also produces evidence that the sisters *Manardi* established a factory about 1728 to 1735, for majolica and “latesini” or “crockery” in general. Another factory of the same wares was founded in 1735 by Giovanni Antonio Caffo. Some time before 1753 Gio. Maria Salmazzo established works to rival those of Antonibon at Nove.

NOVE.—This place became in the eighteenth century the seat of potteries, from which much interesting work has proceeded. In 1728 Gio-

vanni Battista Antonibon established a pottery, and in 1732 opened in Venice a shop for its sale. The business of Nove was widely extended. In 1741, Pasqual Antonibon was at its head. In 1762, his son, Giovanni Battista, became a partner. In 1802 they leased the factory to Baroni. In 1825, Giovanni Battista Antonibon, with his son Francesco, again worked. The wares are now produced in fine modern styles.

The early work included all kinds of ware, services, figures, groups, of large and small size. The full names of the Antonibons are sometimes found on their works.

CANDIANA.—No such place is known, but this name, with date 1620, is found on faience with Persian designs. The letters S. F. C. are also on pieces, and names—as MS. DEGA and P. A. CROSA—which are not intelligible. These wares may well be the product of some Venetian factory, in imitation of Saracen, and the word *Cundiana* have some allusion to the island of Candia.

PADUA.—Sir William Drake cites from Lazari the statement that the potteries of Padua were in a street called the Boccalarie. There was a house, Lazari says, not long since restored, in which a few years ago evident signs of furnaces were found. The walls of this house towards the street were covered with alternate white and blue triangular tiles, within which was fixed the magnificent disk of majolica, fifty-two centimetres in diameter, now in the Padua Museum, showing the Madonna on a throne between St. Rocco and St. Lucia, with angels and an escutcheon above. The ground is concave; the figures—in relief—are white, except the hair, which is slightly yellow, and the Virgin's dress, which is pale blue. This disk is after a cartoon of Niccolo Pizzolo, who, with Andrea Mantegna, was a pupil of Francesco Squarcione, and his signature, NICOLETI, is on a tablet upon it.

A coarse plate, with Adam and Eve, is dated 1563, and another 1564, the styles resembling Faenza.

VERONA.—A plate, with the subject Alexander and the Family of Darius, has a curious signature inscription which has been a puzzle. It is 1563 *adi 15 zenaro [Gio] giovuni Batista da faenza In Verona M.* After the M is an illegible letter. The letters which are in brackets—*Gio*—are by some read *Giu* for Giuseppe, and Mr. Chaffers reads them *Fco* for Franco, and believes it a work of Battista Franco.

ESTE.—“Fine faience” of pipe-clay was made here, very beautiful, with the name stamped in relief. Specimens have decorations in rich corals.

MILAN.—The faience of Milan, as known, dates from the last century.

Services in Chinese decoration, with gold, are signed with a mark including the letters F. C.; and another potter or artist, *Pasquale Rubate*, signs his name to similar works, with reliefs in scrolls, shells, etc. Pieces with yellow borders and Chinese red flowers are of Milan. Some pieces are copies of the Oriental porcelains.



121. Faenza Dish. (British Museum.)

Lond.—The wares of this factory, established in the seventeenth, and continued in the eighteenth century, are not of high character. The name and date, 1764, are on a dish rudely decorated with fish and fruit. The monogram AM, which occurs also on this dish, is found on others, with blue, yellow, and red decorations. The pieces have the three support marks, unusual on Italian wares.

FERRARA.—In 1436 there was a Maestro Benedetto *bocalaro in Castello* at Ferrara. The Duke Alphonso I. was a patron of the art, and sought to establish a pottery in his castle. Wares were made here during the fifteenth and sixteenth centuries. In 1494, Isabella D' Este sent a

plate, broken in three pieces, to be repaired at Ferrara, and it was done. Before 1567, one Camillo was summoned here from Urbino, and seems to have re-established the discontinued works. Some have supposed him to be Camillo Fontana, but this is doubted. He executed a service on the occasion of the marriage of Duke Alphonso II., bearing the emblems of the duke. Ferrara potteries are found decorated in the Urbino style with grotesques. Of the efforts to discover the secret of porcelain mention will be made elsewhere.

SASSUOLO.—At this place, near Modena, work was executed from 1741 by Pietro Lei da Modena and Ignacio Cavazzuti.

TURIN.—The Marquis Campori has found records of the payments of money, in 1564, to Orazio Fontana by the Duke of Savoy, in one of which Orazio is styled "chief potter of his highness." From this it has been supposed that the great ceramist of Urbino had worked for the duke in Savoy, and it is not impossible that he had visited Turin, and superintended the foundation of majolica works there; although M. Jacquemart regards the title as only honorary. There was a factory established about this time. The earliest dated specimen is of 1577, a fruit-dish with open-work sides, painted with a boy carrying birds. The wares which were made here were in many cases decorated in blue, somewhat like those of Savona, and in others with polychrome pictures. Francesco Guagni is named as a painter.

MAURIENNE.—M. Jacquemart describes hunting flasks of faience, closely resembling the French ware of Nevers, as of Maurienne, and attributes also a mark on a dish with blue decoration, *Jean. gony*, to the same place.

CASTELLI.—The wares of the Abruzzi, north of Naples, are interesting, and many of them beautiful. They come down to comparatively modern times. At Castelli, faience has been made from the sixteenth to the eighteenth century, but none is known of the sixteenth. In the latter part of the seventeenth the Castelli fabric survived all others in Italy in fine work; and although the products do not rank in rarity with the relics of the older art, they rival them in beauty, and are often much more to the taste of admirers of art who have not familiarized themselves with the majolica styles. The family of artists named Grue were the most eminent decorators in the eighteenth century. Remarkable decorations were produced, in figure and landscape painting, occasionally heightened with gilding. The Grues continued the work, which educated the Neapolitan modern school of potters, and enabled the Capo-di-Monte factory at Naples to find artists who could produce those exquisite paintings on porcelain which make that ware more valuable than its relief work. The gen-

eral characteristics of Castelli work of the higher class bring it nearer to painting on panel or canvas than the ordinary majolica work. Borders in which cupids are repeated are frequent, and a rich yellow ground and covering to the backs of plates and dishes. It is not easy to separate the works of the different members of the Grue family. A drug jar of 1707 is signed *Kal. Xris Dott. Grue f Neap.*; another piece, *Franc. Ant. Xavierius Grue Phil. et Theol. Doctor inventor et pinxit. In oppid Buxi. Anno D. 1713*; and the name is found (*F. A. Grue*) as far back as 1677. There were several others of the name, who were all painters of pottery. Bernardino Gentile was an able painter on Castelli wares, about 1700. The products were in all varieties of ornamental and useful pottery, even to small cups and saucers of modern shape.



122. Vase: Grotesques.
(Rome.)

In Southern Italy are found a great variety of pottery images, and figures, mostly of a religious character, made sometimes for arrangement in groups forming scenes from sacred history—the Nativity, the miracles of the Lord, etc. Many of these are extraordinary works of art, the faces being remarkable for expression and character. Some are entirely of pottery; others have only the heads, hands, and feet of pottery, the bodies being made of other substances. Various potteries have produced these. Shall we attribute some, which are moulded with the best skill and admirably painted, to the Castelli potters? If so, it is only because of their high artistic merit and the improbability that artists who were able to produce such work were employed at any of the unknown potteries. As specimens of character sculpture, they frequently rank above the best porcelain figurines of Dresden or Höchst. The best specimens appear to be of the eighteenth century.

NAPLES.—The early works of Naples are little known. M. Jacquemart has found the name on works of the end of the sixteenth century, vases painted on one side only, the handles caryatides. On one he reads *Franco. Brand. Napoli.... Gesu novo.*; and on another, *Paulus Francus Brandi Pinx.* 68, which he thinks means 1568. Others have the mark B.G. with a crown, and yet others have the same mark, with an added star or a palm branch. The subjects are incorrectly drawn on a bluish enamel. Nothing appears to have been produced in Naples after these vases, if they are indeed Neapolitan, until the eighteenth century, when two fabrics were in existence, the one of F. Del Vecchio, the other of the brothers Giustiniani.

The Del Vecchio faience is of a variety of forms, and well decorated, especially in table services. Figures and figurines in white enamelled ware are admirably moulded, and busts in classic style on pedestals. Well-painted tiles for wall use were made, and services in cream ware.

The Giustiniani fabrics are of remarkably fine character, some of them unsurpassed by any European work of their period. Black decorations introduced on white enamels, in arabesque patterns and in ancient styles, are remarkably effective. Reproductions of the ancient decorations, black on red, are less skilful, the glaze over the red pottery but poorly imitating the thin lustre or varnish of the Greeks. A very beautiful white bowl on a dish in our collection is decorated with birds in brilliant colors, contrasting with a deep-brown border in arabesques. The dish has in the centre an Italian peasant woman, admirably painted in colors.

After the improvements in cream ware made by Wedgwood in England, large quantities were exported to Italy, and this seems to have led the Neapolitan works to attempt to produce these favorite wares, which they did with great success. The Del Vecchio and Giustiniani white potteries, in form, glaze, and decoration, were superior to any other continental wares of this kind, and, from their abundance, seem to have had a large sale. Cream-color wares from both factories are finely decorated in colors and gilding.

The royal factory of CAPO-DI-MONTE, in Naples, is said to have sprung from a pottery, and faience is attributed to it.

GENOA.—Whether the wares of Genoa are to be distinguished from those of Savona by the mark, a light-house hanging out a signal, is a subject of doubt. Both wares are alike, if these were two fabrics. But certain styles of figure-painting in blue camaïeu, where the work is done in a free sketchy rather than finished manner, are characteristic of one artist or one factory. The products are decorated in blue, as are those of Savona.

SAVONA.—This place, or its environs, has been the locality of an extensive manufacture of pottery from a remote time. In the seventeenth and eighteenth centuries great quantities of ware were made decorated in blue, usually pale and cold, and although much of it is ordinary, occasional pieces are of artistic merit. Large vases, pharmacy jars, dishes, and services were made. River-gods are common decorations. The mark is usually the shield of arms of the town, accompanied sometimes by letters which may be artists' initials. A dish in our collection with sea-gods and



123. Pitcher: Grotesques. (Rome.)

dolphins, is signed B. A.; others have B. C. and various initials. G. S. is supposed to be the signature of Girolamo Salomone, who also used the two triangles crossed which form what is called Solomon's Knot. Jaques Borelly, or Boselli, signs work at Savona in the latter part of the last century.

III.—SPAIN.

Under Hispano-Moresque pottery, the entrance of enamelled wares into the manufactures of Spain has been described, and the history of that fabric traced as it passed into its decadence. Spain, after the Moorish works had become matters of history, produced other faience decorated in styles more like the French or other European makers, and also preserved in various localities much of the Saracen influence which is visible to the present day on Spanish wares.

TALavera was a seat of potteries in 1760 which, Barette says, gave employment to hundreds of people. The manufacture continued to the end of the century; but little is known of its characteristics. Some is described as having a light-green tinge in the glaze, with designs in bold outline slightly colored, somewhat resembling the wares of Genoa and Savona, but less artistic. Others were like Delft.

Brongniart regarded Talavera as the true centre of Spanish pottery, and it is said that the word *talavera* is in Spain synonymous with earthenware, as delft was used in England with the same meaning, and china with us for porcelain. M. Jacquemart describes the wares as having a good white enamel, and the decorations and forms as of great variety and excellence. He says well-painted ornaments, and also reliefs, give beauty to the fabrics; and masks, scrolls, delicate flowers, landscape and figure paintings, are found.

ALCORA.—Laborde ("Voyage en Espagne") describes an important pottery here. A cup belonging to Baron Davillier, with a decoration representing The Family of Darius, is signed ALCORA ESPANA. *Soliva*. M. Jacquemart states that this artist worked in France and Spain, and doubtless some of his works classed as French should be restored to Alcora. A vase with handles, white enamel, decorated with birds and flowers coarsely painted, is supposed to be of Alcora. Other pieces with marks given in the Table are so assigned.

ALCOY.—Laborde also speaks of potteries here, but nothing is known of their products.

MANISES.—We have spoken of this locality in treating of Hispano-Moresque wares. Its works retained Saracenic character for a long

period, and the lustre wares were last made here by the innkeeper elsewhere mentioned. The gilded wares of Manises were much esteemed, so that it was said popes and cardinals ordered them, and the gilding was highly extolled. These were lusted wares, the remains of the Moorish style.

SEVILLE.—M. Jacquemart assigns to this place certain wares in the style of Savona, but with brown and orange-yellow the predominant colors, figures, wreaths of flowers, and ruins painted in fair style, marked S with a star; also a helmet-shaped piece in Moustiers style in blue, with the same mark over an L. Specimens of later work were exhibited in Paris in 1865, painted with dances, bulls, the arms of the Cathedral of Seville, and other subjects.

VALENCIA.—Besides the Hispano-Moresque wares, this place has produced faience in other styles, especially tiles, decorated in a variety of fashions. The Saracen use of tiles for wall decorations has continued in Spain, and paintings on single tiles, or on large surfaces of numerous tiles, are common in Spanish buildings.

IV.—PORTUGAL.

All that we know of the Portuguese works in pottery can be said in few words. LISBON has produced faience, vases, and table services of white decorated with arabesques and flowers in colors. The royal manufactory at RATO has made a great variety of wares, in highly decorative styles—dishes with figures, animals, and vegetables in relief; vases in quaint and odd as well as in ordinary forms; wares in Rouen and other known styles; decorations in flower, landscape, arabesque, and figure paintings. Marks given in the Table are composed of the letters F R, T B, and A S. CALDAS produced black wares with relief decorations, and others in violet, yellow, and green. Bulls are among the figure pieces.

COIMBRA makes black wares; PORTO, wares of all kinds. The history of the art in Portugal is unknown.

V.—FRANCE.

While Italy and Germany were making rapid advance in the use of pottery for artistic purposes, in the fifteenth century, France remained content with the rude wares of the Middle Ages. Doubtless some variation, if not progress, was made in these, but the art has no history in France until after the beginning of the sixteenth century, when Italian potters began to arrive. None of the French wares previous to this time, few indeed in the sixteenth century, are recognized as the work of any locality. In 1520 two potters, Boneau and Papon, worked at Sadirac, near Bordeaux, and made "*potherie de verderie bonne et marchande*" such as *chaufettes*, plates, *écuelles*, and other works; but the ware is unknown. Before 1502 Jerome Solobrin came from Italy, perhaps from Forli, where the name is known as of a potter, and established himself at AMBOISE. In the time of Henry III., Jehan Francisque, from Pesaro; Julian Gambin, of Faenza; and Sebastian Griffio from Genoa, were moulders of majolica at Lyons. In 1588, Jehan Ferro, from Montferrat, made white wares at Nantes. Jacques and Loys Ridolfo, of Caffaguinolo, established a pottery at Machecoul. But although these Italians brought Italian styles with them, and made similar wares to those they had known at home, they were not popular, or, at best, were popular for a brief period, and made little impression on the art in France.

The French, after the art had become naturalized, adopted many original styles, made copies indeed, but retained their own styles, and, in fact, founded a ceramic art in many respects new, fresh, natural, and national, as if no previous works in painted pottery had been known. The major portion of the products of the large factories at Rouen, Moustiers, and elsewhere, although including much that was Persian and Chinese in style, were eminently French in decoration.

Before commencing an examination of the continuous art of France, however, it is necessary to describe an exceptional class of pottery, which appeared and disappeared, leaving no trace of influence, standing in the history of ceramic art in singular lonesomeness, without predecessor, companion, or follower, but well fitted and abundantly able, from its own beauty, to stand alone among the splendid products of all time.

Only a few years ago, attention was first directed to specimens of pottery, which, although well known, had not attracted the curiosity of collectors. Isolated pieces here and there in collections were variously

classed as work of Florence, brought into France by Catharine de' Medici, as work of Girolamo Della Robbia, who came from Italy to France, and as work of a pupil of Benvenuto Cellini. It was observed that interlaced crescents were found among the ornaments, that the letter H was common, and appeared also combined with what was by some supposed to be a doubled C, and by others a doubled D. Thus arose the idea that the wares were of the time of Henri II., and that the monogram referred to Diane de Poitiers, and the name attached to it, by which it is widely known—*Faïence de Henri Deux*, or *Faïence de Diane de Poitiers*.

The interest of amateurs in this remarkable pottery became the greater when pieces were brought together, and it was discovered that they possessed three qualifications always certain to create interest: they were old, they were beautiful, and they were rare. The prices of the few specimens coming into sales were greatly increased, until at the present time this ware is estimated at enormous rates. Fifty-three specimens in all are now known, of which twenty-six are in France, twenty-six in England, and one in Russia. These are severally estimated at values varying from one hundred and fifty to fifteen hundred pounds.

M. Benjamin Fillon, in 1862, impressed from various circumstances that Thouars was the place for investigation into the history of this ware, especially because many specimens had been found near that centre, visited the place, and very soon determined the history, which, when published by him, was received with various sentiments as his facts sustained or overthrew favorite theories.

The story of the faïence d'Oiron is one of the most interesting of the episodes of art history. Hélène de Hangest-Genlis was widow of Artur Gouffier, formerly tutor (*gouverneur*) of Francis I. (who died at fifty-three years of age, in 1547), and also Grand Master of France. We are told that this lady was accomplished, that there is preserved from her hand a collection of crayon drawings of her contemporaries for each of which Francis himself was pleased to compose a verse, and wrote some of them with his own hand. The old Château of Oiron, near Thouars, was her residence in the country—the ancient seat of the Lords of Gouffier—on a great plain, where the wild geese in winter were seen circling, as



124. Faïence of Oiron. Height 7 inches. (Préaux Coll.)

they do before alighting; whence came the name Oi-rond. At the château, in the summers after 1524, this lady seems to have occupied herself with books and art. With books, for it appears that she had a librarian and secretary, one Jehan Bernart; and with art, for she employed a potter, one François Charpentier. These two, Bernart and Charpentier, seem to have been the joint managers of the little pottery, which was worked exclusively for the pleasure and at the expense of the lady. In 1529 she conveyed to them a house and orchard where were the furnace and work-

shops, as a reward for their services; but it does not appear that they ceased in any way to work for her, or made any pottery for sale. In 1537 she died, leaving her son, Claude Gouffier, heir of the estate, and he carried on the work, probably, until 1568. After this there may have been some one at Oiron or Thouars who thought it well to make pottery, and who produced coarse articles, not like the Gouffier products, which had ceased to appear with the lives of the mother and son. The entire fabric was the enjoyment of a lady of wealth, refinement, and cultivation, succeeded by a son whose tastes were perhaps not so pure and good, but who nevertheless must have been a lover of art for the sake of the art. Their products were probably few, made at irregular intervals, as a lady amateur might paint or otherwise amuse herself with art, and the beautiful creations of the little pottery were distributed as presents among friends who cared for such things.



125. Faience of Oiron. Height 7 inches. (Préaux Coll.)

The arms of various houses, probably friends of the Gouffier family, to whom the pieces were presented, are found on specimens, as well as the arms of the king and of the dauphin. Gilles de Laval, whose arms are on one piece, is said to have been a friend and companion of Artur Gouffier. The letter H occurring so frequently is the initial of Hangest. The monogram of H combined with the double C is supposed to be the union of the two names of mother and son, Hélène and Claude.

The Oiron wares are made of fine pipe-clay. They belong to the class known in France as *Faience fine*. They were not made on the model of any pre-existing ware. In forms, the Lady Hélène seems to have taken

her ideas occasionally from silver and other metal vases, but not servilely copying. There was a change after her death, when her son made articles of more complicated forms, less beautiful because less simple, but wonderfully fine in their elaboration. The decorations were in as novel style as the pottery; for instead of paint, they were inlaid work. The lines of the designs were engraved out of the soft paste, and filled in with colored clay, evenly tooled, and polished down to a perfect surface. These designs were beautiful interlacings of ribbons or narrow bands, arabesques, letters, crescents, diamond squares, and other simple but rich forms. Later, reliefs were added—masks, shields, lizards, frogs, shells—which may possibly have been suggested by, or may have suggested, the work of Palissy, which, as we shall see, was contemporary. It has been noticed that the patterns of interlacing lines resemble the beautiful work on the bindings of books of the period, especially those of Grolier and Maioli, so prized by collectors. But it is more likely that the lady, who possessed a library, found her inspiration where the engravers of dies for bookbinders found it—in the exquisite ornamental work, initial letters, head and tail pieces, and border enclosures with which the wood-engravers of the period, and that just preceding it, had ornamented the books of Germany, Switzerland, and France. This mine of patterns had enriched Italian pottery, as we have seen. The ornaments on the bindings of books in the sixteenth century were, in many cases, from dies which seem to have been engraved by well-known artists, who, on the hog-skin bindings especially, reproduced in embossed work designs with which we are familiar in their engravings.

The interlaced styles of ornamentation found on Grolier and other bindings had previously been common in wood-cuts, and exquisite work of this kind was especially characteristic of books published in France just at the period of the Oiron faience. If the library of the Lady of Hangeest did not contain the works of the German, Swiss, and Italian publishers of the previous half-century, it was undoubtedly rich in the luxuriously ornamented books of the Lyons and Paris presses, and probably received constant additions of newly issued volumes which then appeared



126. Faience of Oiron. Height 14½ inches. (Magniac Coll.)

in great number from year to year. One of the pieces of faience has on it the pelican mark of Jean de Marnef, a bookseller; and another, M. Jacquemart tells us, has the head of an old woman copied from a cut in a book. We regret that he does not name the book. When she opened her Book of Hours in the morning, every page was full of the same spirit of ornamentation which characterizes her work. Such a volume as the Orosius of Vêrard was full of suggestion. Giorgio Andreoli may have found in the grand initial S in that book the originals of some of his lusted decorations *a candeliere*. An ordinary volume like the "Cicero" of Petit & Badius, printed in 1531, and coming fresh to her in the country, would have furnished ample motive to the pencil of Hélène of Hangeest. So, too, on the armor of her husband or her relatives she may have seen abundant illustration of arabesque engraving and inlaying with gold, and thus taken ideas of the Persians, traces of which are visible in the faience.

An eminent authority, with the keen eye of a French lover of art, finds in her work "une note triste, qui lui est dictée par son veuvage." So much mystery has enveloped her and her artistic employments, that her art life must be created by some imagination, guided by the few materials left. But what more is needed? She was an accomplished woman, who used the pencil and possessed a library in an age of noble books for wealthy purchasers. To any one familiar with these it is not difficult to imagine the lady's enjoyment as she followed the prevailing taste of the time, and sketched this and that interlacing of lines, this and that graceful idea of a foliated curve; this combination of mosaic pattern, or that free and easy use of lines in which Dürer had sometimes indulged his fancy. One is not forbidden to imagine her looking at the armor of brave men of her family. And when she fell on a pattern which she liked, she laid it aside for use, or perhaps took the ivory-surfaced vase or cup in her hands (they were nearly all small pieces) and traced the pattern on it, and then, with delicate tools, engraved and filled it in with color. There could not be a pleasanter bit of fancy work for a lady, nor one whose exquisite results would afford more satisfaction; and the more that, unlike embroidery or other needle-work, the result was lasting.

The prevailing color used in the decoration was a dark yellow, which, with the cream white of the clay, gives the tone to the pieces, sometimes darkened by the use of brown, and varied with black, blue, pink, green, and violet. Some of the ornamentation is black on white, or white on black. A thin glaze covered all, not so glaring as to hurt the soft tone. It is supposed that the simpler forms are those which were made under

the direction of the lady. They are the more beautiful, but in that respect tastes may reasonably differ. No two pieces are known which are precisely alike.

The pavement of the Château of Oiron is described by M. Fillon. It is of square tiles, each of which bears a letter, monogram, or shield. The letters are colored in violet, and form the legend *Hic terminus hæret*. These tiles seem to be of the same fabric with the finer wares.

Will any more specimens of the faience of Oiron be found? This is the question occurring to many collectors and lovers of art. The story was current a year ago of a Paris dealer who found a piece in an out-of-the-way inn near Thouars, bought it for a song, and went in hot haste to Paris, where he, on the same evening, offered it to a distinguished collector for twenty-five thousand francs. The collector proposed to keep it for examination, and if genuine to accept it. The dealer refused, saying, "No; if you decline it as not surely genuine, its reputation will be destroyed. Take it now or never." The collector decided to decline the risk, and it was sold before midnight to another collector for the sum demanded, and adds one to the number of known pieces. So runs the story. "Si non è vero," etc. It is true that an additional specimen has been recently found. We see no reason why many more should not turn up. There is no greater error than that which is so frequently made of supposing that Europe has been thoroughly searched for valuable works of old art, and that all are now known and catalogued.

This ware has been described before entering on the general history of ceramic art in France because of its exceptional character. It stands alone. It was never copied until in our own time, at great labor and expense, by skilful English potters. Its ornamentation, beautiful beyond praise, was unknown to the potter artists of France, and gave no hints to any of them. The pieces reposed in private houses, unseen, regarded as old crockery of small account, perhaps now and then attracting the eye of a lover of art, who would look and wonder what this was. One and another beautiful thought of the Lady of Hangest vanished from among the possessions of the world when a vase or a cup was shattered by a careless servant, unregretted, until in these later times men have come to think that there are no greater treasures of the history of the human race than the beautiful creations of mind, moulded in clay, of which our bodies were made, and burned in fire to make them outlast the successive generations of dying men.

We turn from the old Château of Oiron, and its lady, to a very different person, and another art story.

The life of BERNARD PALISSY has been so frequently written that it is known to readers of all classes of literature. Very much that has been written about him is imagination, unfounded on fact. This account has no concern with any portion of his history except that which relates to his artistic life. He was in this a type of the French ceramic art, original from the beginning, achieving the most brilliant results in a constant succession of original ideas. Born of poor parents in 1506-'10, or thereabouts, at La Chapelle Biron, in Périgord, as some say, near Saintes as others think, he learned to read, and grew up an artisan in glass, making, cutting, and staining it. He was a hard student while he worked, and thus became somewhat familiar with geometry as well as with more or less historical literature, especially such as was of value in his work as a glass-stainer and maker of windows for churches. While a young man, he travelled in the South and East of France, the Low Countries, Flanders, and parts of Germany, acquiring at the same time knowledge in natural history, geology, and chemistry, and opening his mind to broader views of science. He returned to France in 1539, established himself at Saintes, married, and settled down to work as a glass-painter and land-surveyor. And here one day his destiny overtook him, handed to him in a faience cup. "Twenty-five years ago," he says, "there was shown to me a cup of earth, rounded and enamelled, of such beauty that thenceforth I entered into discussion with my own thoughts, recalling many propositions that some had made me, joking me when I was painting images. And, seeing that people began to abandon them in the country where I was living, and also that the glass work was not in much request, I came to thinking that if I had discovered how to make enamels I could make earthen vessels and other ware of beautiful sort, for God had given me to understand something of portraiture. And from that time, without regard to the fact that I had no knowledge of argillaceous earths, I devoted myself to searching for the process of enamelling, like one who gropes in darkness."

Brongniart thinks the cup that brought his destiny to Palissy was of Nuremberg ware, and M. Fillon thought it was Oiron ware, but afterward revised his opinion, and conceives it to have been a white enamelled cup from Ferrara. M. Delange, in his magnificent work on the wares of Palissy, insists that it was a cup of the Oiron faience which so aroused his imagination; but this was not enamelled, and was no more likely to suggest the thought of enamel as a desirable discovery than any of the common green glazed wares of the potters, and he, a glass-maker, would hardly have described an Oiron cup as "enamelled." There is little on which to found any opinion.

Antoine de Pons went to Ferrara in 1533, and married there, returning to Saintes in 1539, where he became the protector of Palissy. It is suggested that among his bride's presents might have been some Italian majolica, then prized if beautiful. M. Jacquemart hints that it may have been a cup from a Spanish vessel loaded with pottery, Valencia ware and cups of Venice, brought into La Rochelle in 1543, when Francis I. was there, from which the king gave some to many ladies. It is not probable that Palissy knew where the cup came from. It may even have been Chinese, rare but not unknown in those days. It was the enamel which interested him, and it does not appear to have occurred to him that it was possible to go to the place of manufacture and ascertain how it was done. Had he never heard, he who had travelled far, and was wise for his day, of the Saracen works, which were abundant in the Mediterranean ports, or of the splendors of Italian ware, made in a score of well-known factories? There is something marvellous in the fact that such a man, with experience and education, having seen a beautiful object and desiring to learn the art of making the like, should devote years of life and labor to a blind "groping in the dark," sacrifice his little property, sacrifice his family and their happiness, when he could have learned all he desired by extending his travels and asking the men who could tell him. Possibly he had heard of Girolamo Della Robbia, who had come to Paris in 1528 with the Della Robbia "secrets," as they were called, and had thus received the idea that the art was a mystery known to few and kept profoundly dark by those few.

Whatever be the reason, the man was seized with that mania, as it has often been called in precisely similar cases, of inventing something. It was not a painted and glazed pottery which he sought to make. His knowledge of glass, and the existence of glazed wares in France, indicate that this would have been a very easy matter for him. He says that he sought the art of making enamels. It is possible, and probable, especially if the cup which he had seen was true porcelain of China or Persia, that he supposed, as did all learned men of that day, that the material was a composition of some sort wholly distinct from "argillaceous earths," and this composition his experienced eye recognized as different from glass and from glazed pottery. Did he at that time know even the word "émail?" Or are we to read what he wrote twenty-five years later as if he had said, "I thought if I had discovered what I now know to be enamels, I could," etc.? His proposal to his own thought was something wherewith to make "*des vaisseaux de terre et autre chose de belle ordonnance, parceque Dieu m'avoit donné d'entendre quelque chose de la por-*

traiture." Of course it was a vitrifiable substance which he thought to discover, wherewith he could not only beautify pottery, but make other things. The art of painting with enamel colors on metal was at this very time in perfection in France. Nardon Pénicaut, a glass-painter like Palissy, had fifty years previously done such work at Limoges, and Leonard Limosin, the contemporary of Palissy, was producing his superb pieces from 1532 onward. It is interesting, however unprofitable, to study, or to guess at the motives operating on the mind of such a man as Palissy. He stands among artists in a singularly solitary position, enveloped in much obscurity, seeking with blind groping an art secret, founding and building up a department of art destined to immortalize his name, disdaining through pride, or neglecting through ignorance, to ask help from any man, and in the time of success preferring to produce a style of work wholly original, new, and unlike what the world had ever seen.

This is not the place to discuss the questions relating to the religious life of Palissy, which have afforded material for many books, containing some truth and some fiction. Adopting Calvinism when a young man, in the troublous times which ensued he was taken under the protection of the Constable Anne de Montmorency, who, when his own influence was not strong enough to save him, obtained for him from Catharine de Medici, queen of Henry II., the honorary appointment of *Inventeur des rustiques figulines du roy*. This, while he was still at Saintes, lifted him out of the jurisdiction of local magistrates by attaching him to the court.

It does not appear with certainty at what time he began his experiments. As we have seen in his own account, he says "twenty-five years ago," and this account seems to have been written about 1575-'80. But there is some confusion of dates. Perhaps the phrase "twenty-five years ago" may have been used without accuracy, as a general expression, or he may have written this portion of his memoir at an earlier date than other portions, which refer to events in 1575. For it appears that in 1543 he was employed as a surveyor by the authorities to map the lands bordering on the salt marshes of Saintonge, whereby he replenished his exhausted funds, and had means to resume experiments which he had temporarily suspended. If this be correct, the cup which inspired him could not have been from the Spanish vessel which was brought into La Rochelle in 1543.

It is only certain that after his return to France in 1539, and his marriage, he continued for some years his industrious life, as artist in glass, with interruptions for work as land-surveyor, until the desire to discover enamel overtook him. M. Delange thinks this was about 1550. This was the time of the great glory of majolica in Italy, where many workshops

were making enamelled pottery, and before Palissy had discovered the art in France the decadence had gone far in the Italian duchies.

He says he passed fifteen years in the search. With the highest respect for artistic pursuits, and all the admiration of our own time for artistic results, we nevertheless owe far more hearty sympathy to the wife and family of Palissy than is commonly expended on him during this period. He deserved thoroughly whatever of misery he personally endured. No reasonable blame can be attached to a wife who regards herself as ill-used by a husband who leaves her and her children to starve while he omits to provide for them, neglecting his trade and proper means of livelihood to pursue a fancy. The success of the pursuit has no bearing on the propriety of it. The achievements of fine art are glorious, but the misery of a wife and children is in no way compensated by the glory. Very much of sentiment has been wasted on this portion of the career of Palissy, in books designed to teach morality, which had better have been left unwritten. The many graves of his little children in this time, six at least of whom his wife mourned, if he did not, are more eloquent than the labors of their father, who neglected them for the pursuit of his favorite art project. In all frankness, no sensible woman, at least, can study the life of Palissy by the few lights he himself throws on it, without believing that the ordinary glamour of "artistic perseverance," "noble determination," "fixed purpose to succeed," which biographers have thrown around it, is a false glitter. Let us not magnify art above humanity. It is higher civilization to care for the perfection of domestic happiness than to build triumphal arches. Many a shiftless man, calling himself an inventor in pursuit of success, with starving wife and children at home, justifies himself by the example of Palissy, lauded so highly by his biographers, when he ought to be earning bread by doing what labor he already knows how to do. Art demands sacrifices, but neither art nor common sense demands or permits that any man shall sacrifice anything that is not his own to give. Let us draw true, and not deceptive, lessons from the history of art and the struggles of artists. The result of Palissy's labors was magnificent success. In the sequence they were of pecuniary benefit to France and to Europe. In our day the reproductions of his works, which have had wide sale of late years, have given employment to thousands of laborers, and have introduced his art ideas into innumerable homes. But God forbid that all this should be in any manner a justification of the cost at which he achieved success—the cost of an injured wife, a broken family, a row of little graves.

With all his learning, Palissy had never studied Aristotle, and the

"Novum Organon" of Bacon was not then written. The methods of inductive reasoning and experiment do not seem to have been known to him. He had no enamel from pottery to analyze, and could not have analyzed it if he had it. So it appears that he experimented very much in the same way that Tschirnhaus and Böttcher experimented for the universal solvent and for porcelain a century and a half later, by mixing pastes of all sorts of substances, daubing them on bits of pottery, and baking them in potters' furnaces which existed at Saintes. This style of experiment leaves discovery more to chance than to skill. But we must not form a decided opinion of his processes with our limited information. He and France could boast that, unlike Italy, he had no foreign instruction, and that the art, so far as Palissy practised it, he discovered for himself. In their other ceramic works, the potters of France used the art of

enamel as they learned it from the Italians, who in turn had received it in the old line of succession through Assyria from ancient Egypt. But Palissy ware is *sui generis*, without ancestry, born of his brain.

An experiment that he baked in the furnace of a glass-maker, instead of a potter, was a success, and gave him courage. A trial piece melted in four hours, and came out white and brilliant, so that he says, "Elle me causa une ioye telle que ie pensois estre devenu nouvelle creature." But the end was not yet. He does not seem to have known even now of what the successful mixture consisted. He built with his own hands an oven like that of the glass-makers, mixing mortar, carrying brick, spent a month in grinding materials for the enamel, made his earthen vessels, and covered them with his paste, lighted his fires, and piled on fuel, day after day, for six days and six nights; but the miserable mixture would not



127. Vase by Palissy. Ground blue, yellow ornaments. (Louvre.)

covered them with his paste, lighted his fires, and piled on fuel, day after day, for six days and six nights; but the miserable mixture would not

melt. He suspected a defect, mixed other material, which he thrust into the hot furnace, and sought fuel to increase the fire; but it was exhausted, as were his pecuniary resources and his credit. The props of trees in his garden went into the flame first; whatever of wood was movable followed; and, having burned his furniture, he tore up the floor of his house, and this vanished last of all in smoke with his vanished hopes; for the experiment was a failure. Small blame to his wife, who now began to think it time for him to look after his family affairs, and utterly discouraged his enamel mania. He complains bitterly of his own agony, and his wet shirt, which had not been dry for a month, so constant and hot had been his work.

But he tried again, employed a potter to help him, fed him on credit at a tavern, discharged him at the end of six months, with his clothes for his only pay, finished a new furnace himself, and kindled the fires again under his prepared materials. All the dignity and importance attending his final success fail to take away the ridiculous aspect of his new troubles. He had mixed the mortar for his furnace with coarse, unsifted sand, and pebbles will not stand fire. Himself appreciated the ridiculousness of the scene when, in after-life, he described it. But there was no fun in it then. The pebbles split and exploded; and from within the furnace came noises of every kind, from the smallest crack to the roar of thunder. Outside, the poor would-be potter listened in horror to the mysterious sounds; and behind him, friends and family, hearing the confusion among the vases, doubtless more than ever believed the man mad.

But out of this horrible furnace came the first glimmer of success. The enamels on vases and medallions were perfect, but the splintered stones had flown into the melted enamel and adhered, marring their otherwise perfect beauty. Creditors who saw the furnace opened, waiting for pay in goods if the result should be successful, were willing to accept the best of the pieces at low valuations; but Palissy was now a successful artist, in his own judgment, and broke the unlucky batch of work to fragments. "They would have been a discredit, and lowering of my honor," he said. "They would have bought bread for your family," said his sensible wife, and gave him a well-deserved lecture. "Instead of consoling me," he says, "they only gave me maledictions." Whereat, as many a man has done under like circumstances, he sulked, went into his house, and lay down in melancholy despair; for, as he confessed, he had neither money, credit, nor any means of support for his family.

But his courage revived, he raised some means, and tried again. He had remedied the pebble trouble, or the first firing had burned it all out

of the mortar. But the ashes now soiled the enamels. He invented seggars (boxes of hard pottery, fusible only at higher temperature than the objects they contain), and thus remedied this difficulty; and, gradually overcoming the successive troubles of unequal heat, and imperfectly or unequally fused enamel, at last produced merchandisable objects.

It does not appear that he succeeded in making any perfect articles in white enamel—the object of his long search—although the pieces which had been spoiled by the pebbles were probably white. Perhaps sound good sense taught him now to be content with a moderate success. He made small objects, decorated with reliefs, and covered with mingled colors, brown, blue, and white, mottled or splashed over the surface, com-



128. Palissy Reptile Dish. (Soltykoff Coll.)

binning with each other, but distinct, as in some stones, and therefore commonly called his jaspered wares. These he disposed of, realizing now the means of support and of continuing his experiments, which led to the perfection of his work, exemplified in the "*rustiques figulines*," which brought him fame and position. These are dishes and objects of various form, on which, in high-relief, shells, lizards, snakes, frogs, fish, eels, crawfish, and other natural objects are placed among leaves, or on rough grounds, the whole enamelled in colors—deep blue, yellow, green, and brown. The choice of such objects seems to have been characteristic of Palissy, who was a student of natural history. He moulded the objects from nature, and they are remarkably accurate. His shells are known fossil shells, say those who have studied the geology of France; and

among them are many which he had no need to go into rocks to find, as they are common sea and land shells.

He went from Saintes to La Rochelle, remained there awhile, and thence removed to Paris, where he enjoyed at once the patronage of the court. If he indeed produced all the works attributed to him from this time, a great change must have taken place in his tastes. Doubt well exists as to the correctness of classing with his own modelling a great variety of specimens of Palissy ware—that is, made by him, or by those taught by him or his productions—but decorated with reliefs in figures from mythological story, and from history sacred and profane. These include a large number of admirable works, in which the ornaments are in the usual Palissy colors, while the flesh is, in general, in gray tones. Some assign these to one Bartholomew Prieur. Pieces which are reproductions of the pewter work of Francis Briot are also attributed to Palissy. The variety of forms in the ware is great. Vases, ewers, and dishes of many shapes, are all characterized by the same relief decoration and the same general coloring.

Reproductions of this work are of course within the ability of any skilful potter of modern times. The articles can be moulded, and the colors exactly imitated. This has been done to such an extent that the world is full of the imitations, many of which are equal to the originals, and it is therefore extremely difficult to distinguish the genuine from the false. Nothing but a good genealogy to the piece is a satisfactory guarantee that it came from the workshop of Palissy. That shop in Paris, provided by the queen, Catharine de Medici, is said to have been on ground now occupied by the Gardens of the Tuileries, or where the remains of a furnace and broken pottery were found, on the river side of the Louvre.

Among the subjects in relief on pieces attributed to Palissy, some of the most noteworthy are the Rape of Proserpine, the Story of Leda, Vertumna and Pomona, Flora (called La Belle Jardinière), Diana, Jupiter and Calisto, the Brazen Serpent, Charity (a plaque whereon, in an oval frame of shells, the mother and children are in bold relief, but bad modelling); the Baptism of Christ, the Woman of Samaria, a portrait of Palissy, The Seasons on four plaques. Certain figurines, some of which are colored with a deep red and brown, are attributed to him, but these are much doubted. A figurine in the Louvre Museum known as *La Nourrice* (a woman holding a baby wrapped up in the style of babies in old German pictures) has on the foot a mark which also appears on some other figures. This specimen and mark have been attributed to Palissy, but are now assigned to Avon, near Fontainebleau. A modern

French potter at Tours, of great skill, has made admirable reproductions of Palissy, signed with his name, *Avisseau*.

We now proceed to a rapid review of the various potteries of France, among which the most important were those of Rouen, Moustiers, and Nevers; but it will be convenient to examine them in alphabetical order.

AVON.—In 1608 a pottery existed at Avon, near Fontainebleau, where figurines were made, some of which have been erroneously classed as by Palissy. Herouard, physician to the Dauphin, Louis XIII., describes a figure *une petite Nourrice* given by the little Duke of Orleans, son of Henry IV., to the Duchess de Montpensier when she visited him at Fontainebleau; and also many animals—squirrels, dogs, foxes, oxen, cows—angels playing on bagpipes and flutes, various other figurines, all arranged on a table by the young dauphin, as playthings, a quite large dog in the middle, a friar at one end, and a dolphin at the other. The figure of The Nurse, now in the Sèvres Museum, has a mark which is attributed to Avon.

APREY.—Founded in 1740-'50. Ollivier was manager, and afterward proprietor. This pottery produced beautiful work, in elegant forms, copied from metal work, with rocaille reliefs and admirable paintings, especially of birds, in bright colors, and flowers, for which an artist—Jarry—is celebrated.

AVIGNON.—Certain brown wares of pottery, with ornaments in relief, are attributed to Avignon. Some are perforated. Modern wares of Swiss manufacture, in brownish-black glaze, and decoration in flowers, are sold by dealers as old Avignon ware. In this neighborhood several potteries existed—at Apt, Goult, and La Tour d'Aigues. The yellow glazed wares of Apt, with reliefs, are spoken of as in excellent taste. M. De Doni, Seigneur de Goult, established, about 1740, a pottery in his château, and employed the best workmen. This fabric continued till 1805. The decoration was in Moustiers style. The works at La Tour d'Aigues were in operation in 1773.

BEAUVAIS.—As far back as the fourteenth century, pottery was made at Beauvais which was held in esteem, and the wares are mentioned in the thirteenth century. Rabelais, in the early part of the sixteenth century, speaks of a "goubelet de Beauvoys," and of the blue potteries of Savignies, near Beauvais. In 1520, Francis I. and his queen were passing through Beauvais, when "vases of Savignies" were offered to the queen. Doubtful specimens of these wares exist, which resemble early German wares.

BELLEVUE, near TOUL.—Founded in 1758, and sold, in 1771, to Bayard

& Boyer, who carried on the works under the title "Royal Manufactory of Bellevue." They employed good artists, among whom was Cyfflé. A document has been found, giving a list of objects made here, with prices. This includes many groups and single figures of persons and animals, table wares of various kinds, and ornamental pieces, large pieces in undecorated pottery for gardens, pipe-clay plates, vessels, inkstands, and other articles, painted with corn-flowers, and otherwise; religious objects, candelabra, fountains, coffee and tea pots, and a great variety of other articles.

BORDEAUX.—Potteries existed here from 1714, and in 1783 six were in operation. The earliest was that of Jaques Hustin. One piece only is known bearing his name. Raymond and Étienne Monseau were decorators. Little is known of the Bordeaux products.

BOURG-LA-REINE.—In 1773, it is said, Jacques and Jullien, already running potteries at Mennecey and Sceaux, inscribed in the police registry their mark B R, for Bourg-la-Reine, and D V, for Mennecey-Villeroiy. Nothing is known of their pottery. Fine modern faience is made here, and largely exported to America.

CHAUMONT-SUR-LOIRE.—Jean Baptiste Nini produces medallions in terra-cotta.

CLERMONT (Puy-de-Dôme).—Ancient glazed ware, with net-work decoration, like Avignon, glazed to resemble tortoise-shell, is attributed to this place. In the beginning of the last century fine enamelled wares were made, at first imitating Moustiers, and afterward Rouen and other factories.

COURCELLES.—G. Forterie, a surgeon, made pottery. A puzzle jug is signed *Forterie père ancien chirurgien à Courcelles*, 1789. Probably Forterie *fils* was also a potter.

CREIL.—About 1790, M. St-Cricq established a pottery, and made table wares and other articles of pottery and stone-ware. Subsequently the English firm, Clark, Shaw, & Co., who were at Montereau and Mennecey, took this factory also, and produced queen's-ware, in English style, decorated with prints. The word CREIL is the mark, impressed, sometimes with a small cross above it. Specimens have the full name of STONE, COQUEREL LE GROS, or their initials, printed within a circle formed by the words *Brevet d'invention*, etc., etc.

DESVRES.—Old wares are known, probably prior to 1764. Dupré Poulaine made wares, with Chinese subjects, flowers, and birds, the reverses brown, and signed D. P., or with the name of the place.

DUNKERQUE.—Louis Saladin attempted to establish a pottery here in 1749; but the potters of Lille succeeded, after a year's work, in driving

him away. One Duisburg was associated with him, and this name is found on a piece resembling Delft.

LHERAULE.—An old pottery of the sixteenth and seventeenth centuries. Coarse wares, brown and maroon, with ornaments in yellow, red, and white; religious objects, images, etc.

LIMOGES.—In 1757, the *Sieur Massie* founded a pottery here, but only exceptional and no genuinely characteristic specimens are known. The place has been more celebrated for porcelains until in quite modern times, when decorated potteries are produced in great variety and quantity.

LUNEVILLE.—The faience of Luneville is highly admired for the delicacy of paintings and the beauty of the gold. It was made during the last century, but little is known of it. In 1778 the pottery was bought by *Keller & Guérin*, who signed *K. & G.*, according to *Mr. Chaffers*. Figures of dogs, life size, were made for door-step ornaments, which, facing each other, gave origin to the French saying, "*Se regarder en chiens de faience.*"

LILLE.—In 1696, *Jacques Febvrier*, a potter, and *Jean Bossu*, a decorator, worked here, having come, on the invitation of the authorities, to establish a pottery. Their signatures in full are found on specimens—portable altars—in which Rouen influence is visible. *Febvrier* died in 1729; and the work was continued by his widow, *Marie Barbe Vandepopelière*, and her son-in-law, *François Boussemart*. These claimed that their fabric was the most important in France, so recognized, and desired to have it declared a royal manufactory. About 1778 one *Petit* took the factory. Another factory was established by *Barthélemi Dorez* and his nephew, *Pelissier*, about 1712, which passed (1750-'55) into the hands of one *Hereng*, and, in 1786, into those of *Hubert François Lefebvre*.

Another factory was established in 1740 by one *Wamps*, who made tiles like Delft, and was succeeded in 1752 by *Jacques Masquelier*, who produced wares in Rouen style. Most of the works of Lille were more or less like those of Rouen. The *Febvrier* fabric included plates with waving borders, roccaille designs, insects, decorated in bright iron-red, pale blue, lilac, yellow, green, and mingled blue and yellow. Baskets and masses of fruits and flowers occur. Many pieces are decorated in blue only. The faïences of the *Dorez* factory are regarded as among the most beautiful of the work of Lille. The letter *D*, with an accompanying number, is supposed to be the mark, and the fabrics are more in the French and less in Dutch style than those of *Febvrier*. Other works were established at Lille by *Heringle* in 1758, and by an Englishman—*William Clarke*—in 1773. The latter went to *Montereau*. One *Chanon* made brown wares

of hard pottery for stoves and table services, with tortoise-shell glaze, called *terre de Saint Esprit*, in the styles of England and of Languedoc.

LYONS.—Francesco of Pesaro established a pottery at Lyons about 1530. Gambyn and Tardessir, from Faenza, worked at the art about 1547; and Griffo, from Genoa, in 1555. Little is known of their products, and it is not till 1733 that we find Joseph Combe and Jacques Marie Ravier receiving a charter for making faience. They were not successful, and their grant passed to a woman—Françoise Blateran—who carried on a pottery for some years. In 1776, one Patras was proprietor of a pottery, and it has been said produced porcelain. Specimens of pottery are, with great doubt, assigned to these various manufacturers.

MARANS.—Between 1740 and 1745, Jean Pierre Roussencq made pottery not unlike Rouen, and afterward in Saxon styles.

MARSEILLES.—Before 1700 a pottery produced wares resembling Moustiers, with subjects after Tempesta. A dish of this kind is signed *A Clérissy a Saint-Jean-du-Dezert, 1697, à Marseille*: the subject, a lion-hunt, with border in Oriental style. From this time, with the exception of one potter's name, Jean Delaresse, nothing is known of the work in Marseilles till the eighteenth century. Specimens are probably classed as of Moustiers. In 1750 there were ten potteries here, which produced so much that we are told they exported, in 1766, to the French-American islands wares to the value of one hundred and five thousand livres. The makers were the widow Perrin, Joseph Gaspard Robert, and Honoré Savy. The latter (Savy) possessed a peculiar green, but it was closely imitated by others. The mark, a *fleur-de-lis*, attributed to him is doubted. Robert made wares decorated with flowers, fish, and shells, in color and in relief, with insects, occasionally with marine views and other subjects, well painted. The widow Perrin made very fine pottery, decorated in various styles, like those just described, and on various grounds. A mark, B in blue, is attributed to a potter, Antoine Bonnefoy, and F to one Fauchier.

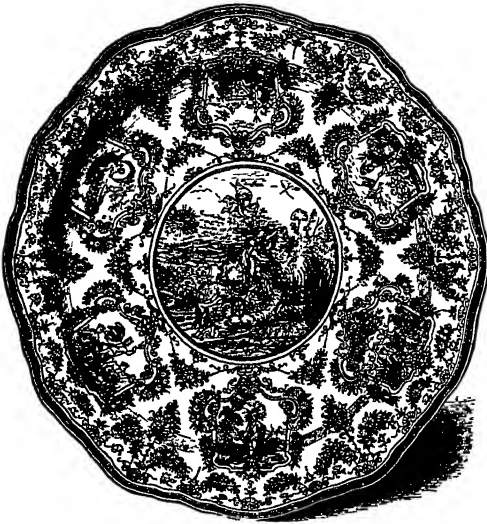
MEILLONAS.—Here a lady, Madame de Marron, Baronne de Meillonas, established a pottery in her château. She painted herself, and employed artists. A signature of one of these is known, *Pidoux, 1765, à Miliona*. The works of this lady, who presented many of them to her native city (Dijon), are prized in Burgundy. Pieces painted by her for her grandmother, now in a private collection, are marked with a monogram, A R. Graceful wreaths tied with ribbons and well-painted landscapes characterize her productions.

MONTEREAU.—In 1775, Clark, Shaw, & Co., Englishmen, established

here a manufactory of queen's-ware, or cream-ware, like the English. The firm afterward united with that at Creil.

MOUSTIERS.—This factory was unknown to modern collectors until

M. Davillier had his attention called to it by a specimen, which led him to examine and develop the history. In 1686, Pierre Clarissy was a potter here. The dish which fell into the hands of M. Davillier was of his fabric. It is oval, decorated with a bear-hunt after Tempesta. The border is in arabesques, griffins, etc., with cartouches, in which are a deer, a wolf, and dogs. The dish is signed by Gaspard Viry, the decorator. This is a type of the earliest known class of Moustiers ware, large pieces, sometimes over two



129. Moustiers Dish. Polychrome decoration. Diameter $13\frac{1}{4}$ inches. (Reynolds Coll.)

feet in diameter, with designs from the engravings of Tempesta, whose works were in favor in the South of France. They are executed in rich blue, outlined sometimes in violet. Another class following these is distinguished by delicate borders and ornaments in the style of the Berains, whose exquisite work for ornamental purposes of all kinds are familiar to students of the beautiful old French work, and of Boulle, equally celebrated. The pieces of this class are characterized by delicious arabesque patterns, founded on the ancient Roman, but disposed with great freedom and luxury over the field — griffins, grotesques, cupids, birds, figures, flowers, and insects are in, and form part of, the arabesque patterns, or are scattered here and there. This was a favorite style for a long period. About 1745, Joseph Olery began to make decorated pottery here. His marks distinguish most of his products, the most common being in part the letter O, through which passes an *S*. M. Jacquemart, however, is of opinion that the number of pieces signed with marks in which this monogram occurs is so large, and of such different times, that they cannot all be assigned to Olery, in which case the mark is unexplained. He decorated in polychrome, using brown, yellow, green, and violet, in rich wreaths, flowers, and fruit, medallions with birds, and small pictures,

mythological and other subjects. Profane story and sacred history are mingled on his works. Grotesque figures, in one or in two colors, sometimes in a peculiar green touched with brown, are scattered over the surface of pieces with the Olery mark. In 1789 there were eleven potteries in Moustiers.

Several potteries were established in places near to Moustiers. Before 1740 there was one at VARAGES; in 1734, one at CLERMONT-FERRAND; in 1759, one at MONTPELLIER (Herault). There was also one in the last century at TAVERNES. The factory at CLERMONT-FERRAND appears to have produced work decorated in the style of the Berains, in imitation of Moustiers.

Montpellier produced coarse imitations of Moustiers and of Marseilles.

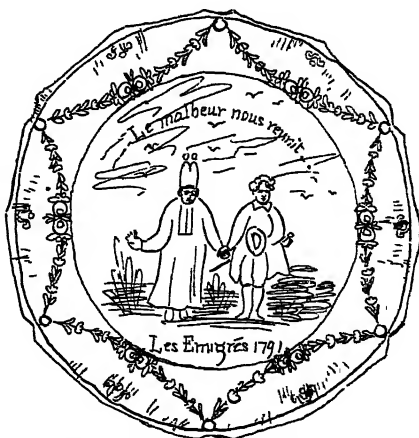
NANCY.—Nicolas Lelong founded a pottery in 1774, but the products were unimportant. In modern times very beautiful faience is made here, which is largely imported in America.

NARBONNE.—M. Davillier thinks there was a pottery here, conducted by Moors, in the sixteenth century, which produced lusted wares.

NEVERS has been from the sixteenth century an important seat of pottery manufacture. Dominique Conrade, an Italian, with his two brothers, established works at Nevers in 1578, and were the only potters here until 1632, when Bartholomew Bourcier founded another factory. In 1652 two more were started, known as the *Ecce Homo* and the *Autruche*. Pierre Custode was the owner of the last named, "the Ostrich" works. In the eighteenth century a number of additional potteries were established. It has been supposed that, after the arrival of the Conrades, several potters in the neighborhood had founded workshops.

The Conrades professed to have secrets in the art. They used stanniferous enamel. M. Jacquemart regards their early work as feeble, and dates the commencement of the fine art in Nevers from the application of French hands to their productions.

He divides the products of Nevers into styles as follows:



130. Faience Patriotique of Nevers. (T.-P. Coll.)

1. Franco-Urbino, with mythological subjects, and ornaments from the antique and Renaissance: influence before the Conrades.

2. Style Italo-Chinese; Chinese or Italian subjects on Italian forms; blue color alone, heightened with manganese, resembling Savona ware: influence of the Conrades.

3. Italo-Nivernais: mythological and ordinary subjects; Italian and Oriental ornaments mixed; wreaths of flowers of the kind used in the enamel art; influence of that art and of cloths. Following these, pieces with colored grounds, chiefly blue, designs in white, pale yellow, and deep yellow, in style of Persian stuffs and of enamel work.

4. Franco-Nivernais: imitation of Rouen decoration; degeneracy of Italian art, and of the decoration in Persian flowers on blue grounds; the fabric commercial, and artistically uninteresting.

It is not possible to assign Nevers wares to their different manufacturers, except where marked, and marks are rare. Blue and yellow are the more common colors used in polychromatic decoration, with lines of white. Outlines of figures are in a dull violet. Red and a peculiar green are found. Goats' heads, leaf-shaped spouts, dragon handles, fruits, and other objects are used in the relief ornaments. Subjects from mythology, history, and poetry are among the paintings. The decorations in Persian style are sometimes very beautiful, especially those in white and yellow on lapis-lazuli grounds. More rare are those in white or blue on yellow grounds.

An interesting, but not very artistic, class of Nevers pottery was produced in great quantity during the latter part of the last century, specimens of which are called *Faïences Patriotiques*. It includes articles, chiefly plates and dishes, on which are painted political subjects, mostly connected with the French Revolution. The ware is generally coarse, and the painting equally coarse; usually a small picture, with or without a motto attached, flags, trophies, caricatures, historical pieces. The illustrations (130, 131) from specimens in our collection exhibit the general character of this faïence.



131. Faïence Patriotique of Nevers. (T.-P. Coll.)

NIDERVILLER. — In 1738 there

were thirty-five furnaces here. Its products in faience, as in porcelain, are important, of great variety, and often beautiful. Jean Louis, Baron de Beyerlé, founded the factory in 1754. The best modellers and artists were employed, and the best work was produced. In 1759, François Anstette was controller of the works, Baptiste Malnat was director, Michael Martin, Pierre Anstette, and Joseph Seeger were painters. Besides these, there was a long catalogue of journeymen painters, modellers, and sculptors.

About 1781, Count Custine, well known to readers of American history, bought the estate and lordship of Baron de Beyerlé, and continued the works. His mark, an interlaced double C, sometimes surmounted by a coronet, must be distinguished from that of Kronenburg or Ludwigsburg, which was usually, but not always, surmounted by a crown. The work under Count Custine was very fine. A remarkable class of work was decorated to resemble veined woods, the decoration a card of white paper, upon which was a picture in black. The corner of the card was sometimes folded down, and the effect often deceptive to the eye. The artist's name was occasionally signed under the picture on the card, as on an engraving. We have a dinner service of the ware, with Beyerlé's mark, decorated with a single large flower, a rose, tulip, carnation, or other flower, in the middle of each piece, and smaller flowers scattered on the borders. Fine faience, enamelled wares, and porcelain were all made at the same time at this factory.

ORLEANS.—There was a factory here in 1753, the charter of which prescribed the mark (an O), with a crown in blue. Jean Louis and Bernard Huet were figure-modellers. Many figures, large and small, were produced. The factory at a later period made porcelain.

PARIS.—Less is known than might be expected of the manufacture of faience in Paris. In 1664, a charter was given to Claude Reverend, who claimed that, by labor and travel, he had acquired secrets in the making of faience and counterfeit porcelain as fine, and finer than that from the East Indies, and that no one in France could equal him in the art. The charter was a good one, but great doubt exists as to whether it was acted on. The potteries of Reverend are known, but some authorities believe that they are imported wares, made elsewhere, and that the charter was used only to cover such importations. M. Jacquemart is clear that Reverend worked at Paris. He says: "The faiences of Reverend are now well known. Their make is excellent, thin, with white enamel, painted in colored enamels, clean, and often excessively pure. They can, as the charter says, rival those of Holland. It must be confessed they are all but coun-

terfeits in the larger number of instances, and Reverend sought so carefully to deceive consumers that his mark seems to have been chosen only to imitate certain Dutch signatures."

This extract indicates the difficulties which attend the selection of specimens, and the question whether he made any pottery at Paris. The mark consists of the letters A R in monogram. Another mark, L V, in monogram is on work almost identical. The styles of all the work are so thoroughly like Delft that no characteristic can be named by which to separate it.

Other potters may have worked in Paris, but none are known till 1720, François Herbert; in 1730, one Genest; in 1750, Jean Binet. None of their works are known. Digne made faience about 1750, in Rouen styles, including pharmacy jars, emblazoned with arms, for the Duchess of Orleans. Several unimportant potteries were established later. It is probable that all the faience made in Paris was imitation of other French factories, especially of Rouen, and that the products are confounded with those of which they were copies.

POITIERS.—Figurines in pipe-clay are known, one of which is signed A. *Morreine Poitiers*, 1752.

PONT DE VAUX.—Leonard Racle (Voltaire's architect) founded works here for large pieces of monumental character, and white faience gilded.

QUIMPER.—Pottery in imitation of Rouen was made at a factory established in 1690. Wares are attributed to Quimper, with gray enamel, having large scrolls on black-blue grounds; also earthenware with yellow engobe and red.

RENNES.—A mortuary tablet in pottery, made at Rennes, records a death in 1653, and indicates the existence of a pottery there. In 1748, Jean Forassasi, a Florentine, began to make faience. Another factory was established shortly after. A group of white enamelled ware is known, representing Louis XV., Hygeia, and Brittany, signed *Bourgouin*, 1764. A jug of glazed ware is signed *Fait à Rennes Rue Hue*, 1769. The works of the Rue Hue factory are fine, sometimes in Moustiers style. White vases, with large flowers in blue, or in blue and lemon color, common in Brittany, are supposed to be early work of Rennes.

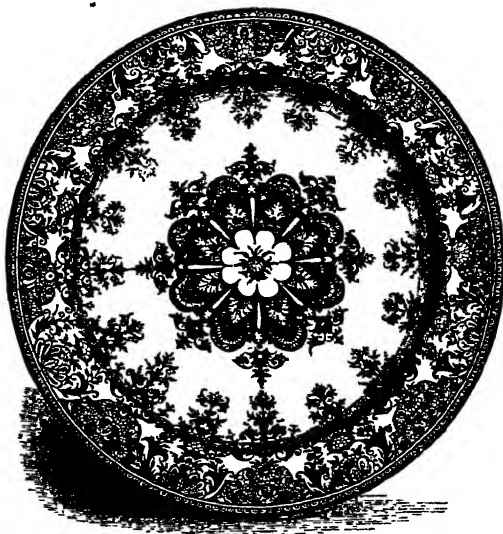
From 1760 to 1785, plates, marriage-cups, stoves, religious figures, and groups were made.

RÉNAC.—A mark R is attributed to this place, on a plate with bouquets in the style of Rennes, but a coarser faience.

RIOZ.—M. Jacquemart records the fact that a shoemaker here made poor pottery by way of illustrating the proverbial "*ne sutor ultra crepidam*."

LA ROCHELLE.—About 1673 a pottery was established here, and early in the next century Jacques Bornier founded another, which stopped in 1735. Jean Bricqueville revived the work in 1743. A plate signed I B is attributed to him. The later works were in the style of Strasbourg, with exaggerated colors. Roses elongated to deformity characterize the products.

ROUEN.—The potteries of Rouen are more important than any others of France. While the Lady of Oiron and her son were making their exquisite wares, and Palissy was groping in the dark after the secret of enamel, and Girolamo Della Robbia was using it in decorating houses and grottoes in Paris, one Masseot Abaquesne, living in Rouen, was making enamelled pottery, the few relics of which now existing lead to the conviction that it possessed considerable beauty. The old château of Écouen, the seat of the Montmorency family, built in the early part of the sixteenth century, had a remarkable pavement, which was long discussed by antiquarians; by some assigned to Italian makers, by others to Palissy. It was at length, however, ascertained that this was the work of Abaquesne, at Rouen. A queer old document exists, which in long legal phraseology discharges the constable (Montmorency) from a claim on account of tiles of enamelled pottery which he and his wife Marion, and his son Laurens, who seem to have been jointly interested in the business, had made for the constable. Another document, published by M. Gosse-



132. Rouen Dish. Diameter 22 inches. (Reynolds Coll.)

lin, shows that Abaquesne made apothecaries' pots of enamelled ware. In the Hôtel de Ville at Havre he decorated a "salle faïencée" in 1535. He was still at work making tiles in 1557, and widow and son continued work after his death. Thus early begins the history of Rouen pottery; but there is a long hiatus in the history from this time. The Duc d'Anmale has, or had, two pictures formed of these tiles of Abaquesne. The groups were each five feet three inches by six feet four inches, consisting of two hundred and thirty-

eight tiles. The one set have a representation of Marcus Curtius, the other of Mutius Scævola. One set has the mark *A Rouen*, 1542. A tile from the Château d'Écouen, in our collection, is richly colored, with sheaves of wheat and fleurs-de-lis, deep blue and yellow, with touches of brown.

In 1640, Nicolas Poirel received a charter for making faience at Rouen, which he afterward transferred to Edme or Esmon Poterat, then a potter at Rouen, to whom another charter was granted in 1673. From this time decorated wares were made. The early wares were painted chiefly in blue, and much in the same styles with those made at Delft, in Holland,



133. Faience à la Corne. (Rouen.)

and it is practically impossible in many cases to determine at which place a specimen was produced. The early wares imitated the Chinese, which they were designed to rival. A single dated specimen is known of 1640, but no other until 1699. The latter, a bowl, is signed *Brument*. The styles of Rouen pottery became in time peculiar, so that much of the ware is unmistakable. The polychrome decorations included a remarkable union

of blue and red, with more or less yellow, and comparatively slight use of other colors. The prevailing blue tint is striking, and, once seen, not easily forgotten.

Certain forms of Rouen decoration are known as Lambrequin, Lace, Rayonnant, and À la corne, from their prevalent characters. The distinctions are not always complete, one style running into another, or one piece uniting more than one style. Nor is it clear that those using these terms have any well-defined notion of what constitutes the difference. Faience à la corne is that which has the cornucopia prominent in the decoration. The style rayonnant is technically that which is marked by a division of a circular piece into sections by rays of decoration proceeding from the central to the border ornamentation. Lace and lambrequin patterns are to be understood from their names, the lambrequin being,

in fact, lace patterns arranged in separate groups, looking somewhat as if they could be cut out separately as pendants of a lambrequin.

Among the Rouen styles are dark blue on pale blue; black arabesques on yellow-ochre grounds; white scrolls on blue grounds, with red touches: baskets of red, green, yellow, and white flowers, supported on green and yellow scrolls; flowers and bouquets among heavy scroll patterns, looking like work in iron. Vases are sometimes decorated with pictures, in which the draperies are red and yellow, the peculiar yellowish red of Rouen predominating in the other ornamentation, which is of tulips and various large flowers. Plates have the entire field covered with pictures in pale blue, with slight touches of green, yellow, and red, while the borders are dark blue, with flowers in white, green, and red. A striking decoration is in flowers grouped in Chinese style, colored red and white, with leaves in dark blue on ground nearly black. The general aspect of Rouen faience is more odd and striking than beautiful.

It is said that in 1713, when Louis XIV. sent his plate to be coined for the expenses of the war, he ordered a service of Rouen ware to supply its place. A soup-tureen, in the form of a turkey, said to be of this service, was sold at the Bohn sale in London, March, 1877, for two pounds ten shillings.

There are many marks of potters or artists found on Rouen wares, but few are assignable to their owners. Confusion exists between some of these and some of the Delft marks.

SAINTES.—In the time of Palissy there were potteries near here, and he employed their ovens in his experiments. M. Fillon describes a drinking-flask, decorated with roses and tulips, on which is *PP à l'image N. D. à Saintes*, 1680. In 1788 four potteries were at work, and in 1791 two others. Nothing is known of their products. At BRIZAMBOURG, near Saintes, Enoch Dupas was a potter in 1600, making pottery with stamped or impressed work, and in marbled colors, with green bottoms. At LA CHAPELLE-DES-POTS, near Saintes, which was the place where Palissy found his assistance from potters, blue and marbled wares were made.

ST. AMAND.—This fabric was founded before 1740 by Pierre Joseph Fauquez, also a potter at Tournay. He was succeeded by his son, who was again succeeded by a son in 1773. The work is characterized by a bluish glaze, on which, among other colors, a white enamel is applied. Rouen styles were imitated. On a fountain is a dolphin in relief, the scales heightened with blue, while the sides have ornaments in white. Pieces were made in Strasbourg style, with bouquets and birds, and in the same style intermingling with the white-enamel ornaments. Lace pat-

terns are used in the white around wreaths of flowers, with medallions, in which are colored designs. White flowers alternate with colored. Charming decoration was done by a painter—Alexandre Gaudry—in animals, pastoral subjects, scenes from Lafontaine's fables, and other groups. Flowers were painted by Jean Baptiste Desmuraille, tulips, roses, and pinks predominating in bouquets. Violet, golden red, and a rich green were his best colors. A red or brown line, sometimes gilded, encloses the pieces, and scalloped borders are colored blue, red, and green.

ST. CLOUD.—A fine plate, decorated with blue arabesques, bears the mark known as that of Trou on porcelain. In 1690 there was a pottery here, probably that of Chicanneau, who discovered the art of making soft-paste porcelain in 1695.

Certain pieces, heavy, coarse, with imitations of Rouen in dark blue outlined with black, are attributed to some unknown factory at St. Cloud.

ST. PAUL.—Pottery of the eighteenth and nineteenth centuries. Designs made with patterns pricked in paper. Mark S. PAUL impressed.

SAINTE FOY.—A pilgrim's bottle is known, with figures in costume of Louis XV., signed *Fait par moi Laroze fils à Sainte Foy*.

SAMADET.—Pottery made from about 1732, of excellent character. The enamel was fine and white. Birds and flowers were well painted. Fruits are mingled with flowers and foliage. Pieces have bouquets, with the look of Persian stuffs; iron-red poppies, with drooping leaves, yellow or lilac flowers, leaves varying from yellow to green and with the two colors mingled. The manufacture continued till modern times.

SARREGUEMINES.—Established 1770, by Paul Utzschneider. Wares in imitation of stones, granite, jasper, etc. Raised figures in white on blue and other grounds. Red stone-ware. The factory continues, and now makes beautiful faience of all kinds for commerce, much of which comes to America.

SCEAUX.—In 1748 an architect, De Bey, having possession of pottery works, called to his aid Jacques Chapelle, a potter, and subsequently these brought into association with them three others—Delanée, Minard, and De Châteauneuf. This firm collapsed in 1749, and nothing appears of their work. In 1750, De Bey and Chapelle began to make "Japanese faience," enamelled pottery of good paste, imitating in decoration the Oriental porcelains. They now tried to make porcelain, but the Vincennes (afterward Sèvres) royal works sought to stop them. Litigation ensued, in which they were successful, and the works went on, making, in the end, both pottery and porcelain. The pottery was very fine, decorated with mouldings and reliefs, with fine white enamel, bouquets, emblems, and

those pretty groups of Cupids in clouds which are also seen on Sceaux porcelain; wreaths of laurel and arabesques in gold and color characterized the ornamentation. In 1763, Jullien, a decorator in the works, took a lease of them from Chapelle, and formed a partnership with Charles Symphorien Jacques, a sculptor and modeller. These two also conducted the works at Mennecey-Villeroy. In 1772, Richard Glot, a sculptor, bought the pottery, and all the secrets, arts, etc., of Chapelle. Groups, figures, and graceful products increased, the porcelain fabric being now in full progress. Glot used for his mark an anchor, in allusion to the Duc de Penthièvre, High Admiral of France, his protector. At one time he added to it the letters S. P.; at another, the word SCEAUX. His faience is beautiful; sometimes with figures of children moulded on lids of pieces, and many varieties of color decoration, flowers, scattered bouquets, corn-flowers, and subjects well painted. A class of Glot's work is in a yellow paste, resembling pipe-clay, on which the decorations appear dull.

SÈVRES.—The royal porcelain factory has not been credited with any works in faience. Nevertheless, it is probable that such work has been made there, at least in modern times. After the late war with Germany, several large faience urns, designed for decoration of terraces or gardens, of which we have a specimen, were bought in Paris and brought to America. These are fine enamelled work, marbled in rich colors outside, and white within, bearing the usual factory mark of porcelain, the date in an oval, in large size. Were they possibly exceptional work ordered for imperial use before the war, and diverted from their original destination?

Other potteries seem to have existed at Sèvres. About 1785 one Lambert produced work of fine forms.

SINCENY.—Pottery works were here from 1737. Many of the products are undistinguishable from those of Rouen. After a time the Strasbourg styles were copied closely. The name of Pellevé, an artist, is on a jardinière.

STRASBOURG.—We retain the old classification of Strasbourg as French. Charles Francis Hannong established a pipe factory here in 1709. Prior to this it is probable that pottery had been made in the styles of Nuremberg, but we know none of it. Hannong rapidly advanced from the making of pipes to the production of faience and porcelain. Jean Henri Wackenfeld, one of the workmen who had been employed in porcelain-making in Germany, an art then jealously guarded as a secret, and who had fled to Strasbourg with what knowledge he possessed, was employed by Hannong in 1721, and the two united their knowledge of earthenwares in the improvement of the Strasbourg products. New works were

established at HAGUENAU, near Strasbourg. Charles Hannong gave up the management to his sons, Paul Antoine and Balthazar, and died in 1729. In 1737, Balthazar took the Haguenau, and Paul the Strasbourg works. The latter made good faience, decorated especially with flowers and insects, and in 1744 added a fine gilding which he had discovered, the first specimens of which he presented to Louis XV. on his passage through Strasbourg. The royal manufactory at Sèvres in 1754 interrupted his manufacture of porcelain, and as he was forbidden to continue it, his works were suspended, and he left Strasbourg. His son, Pierre Antoine, revived the pottery in 1760. He offered to sell to Sèvres the secret of hard-paste porcelain, but that bargain failed, and he and his brother Joseph Adam continued to make pottery till 1760, when the restrictions on porcelain-making in France were so far removed that decoration in one color was permitted to any makers, and they again made porcelain. But debt overwhelmed him, and he was compelled to leave France, dying in Germany. The potteries of Strasbourg were closed in 1780.

The faience of Strasbourg is not of the highest class. The paste is coarse, the enamel is pure, with ornaments, relief work, and painting in good style of flowers and subjects. Ornamental as well as useful wares were produced. The flower paintings resemble those of Marseilles, but the latter can be distinguished by a slight relief, detected by passing the finger over the surface.

The Haguenau works continued under various management to nearly the close of the century, their products resembling those of Strasbourg.

THOUARS.—Oiron, near this point, was the seat of the faience d'Oiron, and potteries here and in the neighborhood were numerous—at RIGNE (1771), at CHEF-BOUTONNE (1778), at FONTENAY (blue and marbled wares, 1558-'81), at ILE-D'ELLE (1636 under Rolland, and 1735-'42 under Pierre Girard).

TOURS.—Works were here in the last century, of Thomas Saily and of M. Epron. In the museum at Tours is a pair of sphinxes signed *Dupont*, 1797, a workman of M. Epron.

VALENCIENNES.—About 1735, François Louis Dorez came from Lille and established work here. His initials L. D. in monogram may possibly mark his work. In 1772, G. J. Becar founded a pottery, but seems to have been unsuccessful. Small images in pipe-clay are assigned to him.

VINCENNES.—It is supposed that pottery was made here at about the time of the establishment of the porcelain works (afterward of Sèvres), by those who were experimenting on the production of porcelain. A piece is known with the interlaced double L on the bottom.

Other faience factories were established in France at various places, among which are the following, whose works are not important, unless of exceptional artistic character :

AIRE, 1730.	ÉPERNAY, 1761.	MONTIGNY, 1739.
ANGOULÊME, 1784	GOINCOURT, 1795	NANTES, 1588-1751
ARBOIS, 1746	LANGRES, 1788.	NÎMES, 1702.
AUXERRE, 1798.	LE CROISSIC, 1627.	OGNES, 1748.
BOISETTE-LE-ROI, 1733	LES ISLETES, 1737.	PONTAILLER, 1600(?).
BOULOGNE, 1788.	LIGRON; eighteenth century.	PREMIÈRES, 1783.
CAMBRAI, 1540-1646.	MACON, 1791.	RAMBERVILLERS, 1780(?).
CHATILLON, 1766.	MALICORNE, 1700.	ST. CLEMENT, 1730.
DANGU, 1753.	MARIGNAC, 1737.	ST. OMER, 1750
DIGOIN, 1788.	MATHAUT, 1749.	THONVILLE, 1756.
DIJON, 1791.	MELUN, 1791.	VACCOLLEURS, 1738.
DOUAI, 1782.	MEUDON, 1726.	VILLERS COTTERETS, 1737.

The student who seeks further information on French potteries will consult M. Jacquemart's "*Histoire de la Céramique*," and the "*Guide de l'Amateur*" of M. Demmin, as well as other works on special fabrics, which are named in the preface.

VI.—GERMANY.

We have now to examine a history of the beginning of which, unfortunately, very little is known. If the authorities correctly describe the ancient tiles found in Germany as enamelled, then long before the art of enamelling pottery was introduced into the South of Europe it had been practised in the Northern regions. Unglazed, glazed, and enamelled potteries were made in Germany certainly as early as the thirteenth century, and probably long before that. The making of unglazed pottery is, as we well know, an art common to all peoples, civilized and savage. We have no need to ask its origin among any race. Glazed potteries were made in various parts of Europe in early and late Roman times, and there is nothing to cause surprise in finding it continuously produced in Germany. But the use of stanniferous enamel has in almost, if not quite all, cases been transmitted



134. Nuremberg Stove Tile: St. Mark.
Dark green. (T.-P. Coll.)

from country to country and age to age. We do not know certainly that the Chinese derived it from the West, but we have reason to believe it. How, then, did the Germans in the north country acquire it? Was it indeed an original invention with them, derived by the accidental use of tin at some period? Is there some lost line of the art, yet to be traced from Europe, along the track of the Aryo-Germanic immigrations, which will take us back to the manufactures of Central Asia in ancient days? Did it come from the Rhodians who made the tiles for St. Sophia? Or did some roving Saracens wander northward with the art, and introduce it among the German races, teaching them how to add beauty of color and surface to their unglazed potteries?

These questions can only afford subject for conjecture until more is known of the historical remains of the art. It is not impossible that a separate line of history may be established from the Byzantine arts in the time of Justinian to and through the North of Europe. It is specially interesting to us, since through Germany, rather than the South of Europe, the art as practised in England must trace its origin.

A notion prevailed for a long time that a potter at Schelstadt, in Alsatia, invented glazed pottery. But this notion was perhaps due to a

statement in an old writer that the potter who first introduced glazed ware into Alsatia died at Schelstadt in 1283.

Germany abounds in ancient pottery wares, covered with lead glaze, which are of the centuries prior to the thirteenth. Stoves made of enamelled tiles are numerous, and of very old fabric. These tiles were usually decorated with relief subjects, many of them highly characteristic works of old art. Ancient brick churches were erected with various external architectural ornaments in pottery, which still defy time. Among these numerous remains of early art, it is desirable to know more exactly than we are yet informed what are the oldest specimens of stanniferous enamel. M. Demmin



135. German Stove Tile. (Barron Coll.)

has thrown much light on the subject, but we need much more.

The Convent of St. Paul at LEIPSIG, was built 1207. In the building

was a frieze of tiles, having relief subjects representing heads of Christ and the apostles. At the demolition of the convent these were scattered or destroyed. M. Demmin secured one, on which is a head of Christ. This tile, he says, is covered with stanniferous enamel, and colored green shading into black.

At **BRESLAU**, in Silesia, the Kreuzkirche was founded by Duke Henry IV., in 1288. The monument of Duke Henry in this church, made of pottery, green and red, described as enamelled, is one of the most important early ceramic works in Europe. It consists of a sarcophagus, on which the life-size effigy of the duke reposes. The sarcophagus is surrounded by twenty-one full-length figures in relief, with winged-cherub heads between them. The figure of the duke is well executed. He lies on his back with folded hands, his shield on his side, his head supported by a pillow. The entire character of the work leaves no reasonable question that it was executed about 1300 A.D.

At **BRANDENBURG**, in the Church of St. Katharine, built 1401, the church itself a fine specimen of old brick-work, at the end of the transepts are large screens of pottery, glazed or enamelled dark green, made in open-work, and statuettes of the same material in niches.

At **LUBECK**, the old Rathhaus, on the market-place, a curious brick building, erected in the thirteenth and fourteenth centuries, has alternate courses of red unglazed and green glazed or enamelled bricks.

Throughout Germany such remains of the art abound. It is not probable that the enamelled tiles of the convent at Leipsic were the first of their kind. The art had probably been practised before 1200 in all parts of Germany, and has continued in use, without interruption, down to the present time.

The Hirschvogels of Nuremberg are the earliest artist-potters of whom we have any knowledge, but they were probably preceded by a long line of able workmen.

NUREMBERG.—Veit Hirschvogel was born in 1441, and lived till 1525. He had three sons, who were potters after him. He was a glass-painter, sculptor, and artist in pottery. He lived in a time when Nuremberg was a mother of arts. The fifteenth century witnessed a remarkable advance in science and art in the old town, unparalleled in the history of any other city of Europe. The first paper-mill in Germany had been started in Nuremberg in 1390; and Koburger established his twenty-four printing-presses there within a century later. Johann Müller, Regiomontanus, made Nuremberg his home in 1471, and his great genius made the place a scientific centre, as he established his observatory, and issued his learned

works from the Nuremberg press. Peter Hele invented at Nuremberg, in 1500, "Nuremberg eggs," the first watches. The goldsmiths of Nuremberg had world-wide reputation for exquisite work. Adam Kraft, the mighty workman in iron, born in 1480, enriched the Church of St. Laurence with his grand Häuslein for the reception of the Host; and Peter Visscher, born 1455, and his five sons, made their city renowned for like work in metal. Veit Stoss, sculptor, painter, and wood-carver, grew blind over his wonderful productions. Then, towards the close of the fifteenth century, came Albert Dürer to the old town, to give new birth to all the arts, and wield such a power on the whole art world as no other one man ever wielded in all the ages. Thus the useful and ornamental arts were advancing with gigantic strides in Nuremberg.

When we look at the rise and growth of the ceramic art in a city like Urbino, in Italy, in the midst of a general revival of arts which made that city the Athens of Italy, and turn to the North to look at a precisely similar condition of affairs in Nuremberg, we cannot fail to be struck with the fact that at the same date the same progress should suddenly commence, in the South under the fostering care of noble patrons, in the North simply under the impulse which the popular love of art began to give it. Raphael, born in Urbino in 1483, was enabled to reform and elevate the entire art standard of Italy, because the wealthy and noble of Italy were his patrons. Dürer, the first of modern men to make an engraving relate a story or illustrate an epic, working for the masses in Germany, and supported by the small contributions of the mechanic and artisan who bought his works, more than by the rich who also bought them, infused into the German mind a thorough knowledge and love of the same elevated art standard. The art fostered by patronage in Italy produced the beautiful, but did not lead Italians to unite the beautiful with the useful; whereas in Germany, the people, high and low, sustaining their great teachers, accepted from them lessons which they at once utilized, and Germany from that time forward led Europe in the union of the useful with the ornamental in art.

Maestro Giorgio, in Gubbio, made vases and costly dishes to adorn the homes of the wealthy; and in fifty years the art of Giorgio, never practically useful, had died, and Italy ceased to make majolica. The art had no educational effect on the people of Italy. Veit Hirschvogel and his sons, in Nuremberg, made stoves as well as vases; and their art went into the home-life of all classes in Germany; survived the generations of men; furnished, from the Low Countries, the demand of all Northern Europe, including England, with abundant beauty of decoration for domestic use:

had inestimable influence in the education of the entire German people : blazed out in the splendor of the invention of true porcelain at Dresden : and shines to-day in the magnificent products of hundreds of German and English factories, the legitimate descendants of the Nuremberg pottery.

In the Berlin Museum is a jug by Veit Hirschvogel, of 1470, somewhat resembling Italian majolica, but brighter in colors and finer in enamel. It has relief decorations—the Crucifixion, and Faith, Hope, and Charity. The Dresden Museum has a jug, green, with relief subjects, dated 1473. The South Kensington Museum has a cruche of the fifteenth century, with reliefs of Adam and Eve, enamelled with blue, yellow, green, white, and manganese. The stained-glass work of Veit Hirschvogel is among the treasures of Nuremberg.

His son Augustine succeeded him as a potter, being also a painter and engraver. He was born in 1488, and lived till 1560. He went to Italy, married in Venice, and returning to Nuremberg, brought with him probably some of the ancient classical forms which he reproduced in great perfection. His works were ornamented in reliefs, modelled by hand, and finely enamelled.

The great pottery stoves in use in Germany, made of tiles, afforded opportunity for some of the best displays of the art of Hirschvogel and other German potters. In the château of SALZBURG is preserved a superb specimen of the old German stove which is much admired, dating probably from the fifteenth century. We have heard the story told there which we find in all the books, that at some time some one from England offered an enormous price for it, the French version placing it at thirty thousand francs, and the Germans making it considerably larger.

Some of these stove tiles, which are often twenty-seven inches by twenty-five, are decorated with admirable reliefs of Scripture scenes and other subjects. They are usually enamelled in dark green, occasionally mingled with yellow or brown. Three in our collection, rescued from the wreck of an ancient stove in Nuremberg, have relief subjects, surrounded by frames of foliage and cherubs. On one is St. Mark (Ill. 134); on another, Spring, represented by a boy with fruit and flowers; on the third, Mercury. In the Sèvres Museum are two slabs of brilliant enamel colors on which are relief figures in white. One figure has the hair gilded.

Veit Hirschvogel, the younger, was also a potter. He was born 1471, died 1553.

The art thus founded, or, rather, brought to perfection from previous ruder work in Nuremberg, continued in the hands of various potters there down to recent times; but the works of the different makers of faience

are only distinguishable when marked. George Leibolt is named as a potter and modeller about 1650, making unglazed wares, which he signed G L, and with the same letters in monogram.

Abraham Helmhack is said to have been a painter of glass and pottery celebrated for his red colors, who died in 1724.

In 1712, a factory was founded at Nuremberg by Christoph Marx and Johann Conrad Romeli. G. Solomon Kees succeeded Marx in 1731. George Frederick Kordenbusch (born 1731, died 1802) was afterward a proprietor, and Andreas Kordenbusch was a painter of faience. Johann Tobias Eglert was a potter in 1791, succeeded by Johann Heinrich Strunz, the last of the Nuremberg potters.

A bell in the Sèvres Museum, decorated in blue camaïeu, has the name of *Stroebel*, painter, and *Christoph Marx, Johann Jacob Meyer, des H. Reich. Stadt. Nurnberg, 1724*. Other artists' signatures are *G. F. Greber, Gluer, Tumber, and Possinger*.

Some fifty years ago C. W. Fleischmann established at Nuremberg a factory for making all kinds of objects in papier-maché, and produced some in terra-cotta and in enamelled ware, reproductions chiefly of old works. This factory continues now. The mark is circular—FLEISCHMANN'S FABRIK, NURNBERG.

BAIREUTH was a seat of old potteries. In the sixteenth century it began to produce faience. The pieces are well made, the pottery light, and the decoration chiefly in blue. The museum at Sèvres has a specimen signed *Bayreuth*, and several marks are attributed to this fabric.

VILLINGEN, in the Black Forest, is famous because here, in the early part of the sixteenth century, lived and worked Hans Kraut, who had no superior as a ceramic artist. His great work was a tomb in the Church of the Knights of St. John at Villingen, erected in 1536 to the memory of Wolfgang de Müsmünster, a commander of the order. It represented, in relief views, the siege of Rhodes, which had occurred a few years previously. This monument has been destroyed, but a large plaque from it remains, showing a naval combat, and the inscription to the memory of the knight.

The stoves which Hans Kraut produced are of great celebrity. Roof tiles from his pottery have outlasted the storms of three centuries, and are in perfect condition and glaze. Before the old potter died, in 1590, his skill in art had won him, among the people, the reputation of sorcery. He was refused burial in consecrated ground; and his body was interred outside the city, the grave marked by a stone on which was engraved a potter's wheel.

The manufacture of pottery has continued in Villingen down to modern times.

STREHLA has a pulpit which is of pottery, enamelled or glazed, it is not certain which. This curious work includes a life-size figure of Moses, who supports the pulpit with his right arm, while the left hand holds the tables of the law. Above the door Delilah is represented cutting the hair of Samson, and, below, Samson carries off the gates of Gaza. At the foot of the pulpit the four evangelists, in high-relief, are surrounded with green foliage. Eight plaques have subjects in relief, and Latin inscriptions referring to them—the Creation, Abraham, the Nativity, the Crucifixion, etc. An inscription in German records that this work was made by Michael Melchior Tatzen, potter and sculptor, in 1565.

In AUGSBURG, Adam Vogt made stoves, enamelled in black, some of which are extant, bearing his name and the date 1620. In excavations at the Carmelite convent large numbers of fragments of figures, knights, workmen, and religious subjects, in a variety of costumes, made of pottery (*terra-cotta*), well modelled, were found, and are supposed to be of the middle of the fifteenth century.

At OBERDORF, Hans Seltzmann was mayor in 1514. He has left a glazed or enamelled stove in the Schloss at Fuessen, in Bavaria, on which is recorded the fact that he made it in 1514.

Stoves and other works in faience were made at MEMMINGEN in the fifteenth and sixteenth centuries. The general wares were decorated in blue, with wide borders, sometimes with family arms. Later work was in polychrome flowers in the style of Strasbourg.

BUNZLAU, in Silesia, is celebrated for old stone-wares, and in more recent times for coffee and chocolate pots of fine glaze, white within and brown or mottled without. In the town-hall is a gigantic coffee-pot, nearly fifteen feet high, work of the last century.

HARBURG is more celebrated for the exquisite painting on glass of Johann Schaper, 1620–'70, than for his painting on faience, although the latter is prized. His work on glass is in black, exceedingly delicate in finish, the most minute details of landscape and figure being executed with all the perfection of an etching on copper. His faience mugs are painted in somewhat similar style, usually in brown on the white enamel, the lights scratched in.

At SCHAFFHAUSEN stoves of great beauty were made in the sixteenth century, some of which were decorated with reliefs by, or from the designs of, Tobias Stimmer (born 1534), a well-known wood-engraver, whose wood-cuts of Bible and other subjects abound in books of his period.

Other works in faience were made here in the seventeenth and eighteenth centuries, which are odd and sometimes beautiful. These have commonly dark-chocolate, almost black, enamelled grounds, on which paintings, subjects, flowers, etc., are executed in bright but thick colors, and sometimes inscriptions in patois. In the museum at Sigmaringen is a large plate representing a scene in the Passion, signed *Gerrit Evers Schaphuysen*, 1695. On another, in the same museum, is this rhyme:

Eenen Waegen met paerden
 Ist eyn costelyk Dink op arden
 Maer better een vrouw vol vit moet
 Dat wat de man seget dat doet.

This is signed *Paulus Hammelkerz*, and dated 1743.

GENNEP.—German Luxembourg produced gigantic dishes in pottery, with stanniferous enamel, decorated in colors—yellow, reddish brown, and green. M. Schwaab at the Hague has four of these, twenty-four inches in diameter, the designs and ornaments in champ-levé style in engobe. One, representing the sacrifice of Abraham, is dated 1712; another, with the Holy Family, has the name *Antonius Bernardus von Vehlen*, 1770, 24 August, Gennep. In the Nadar collection (sold 1866) was one decorated with a comic subject, and the name *Albert Murs*, 1724. In the museum at Sigmaringen is one with the name *Peter Menten*, 1738. In our collection are two—one twenty-six inches in diameter, the other twenty-two. The larger, dated *Ano* 1713, has a representation of the Crucifixion, with the instruments of the Passion, and large flowers. On the other, a full-length figure of St. Joseph, holding the infant Jesus, stands in an arched frame, above which is the crowned eagle of the Holy Roman Empire. On the border is a wreath of scrolls and flowers. Under the figure is *Johannes Murs Johanno Murs*. I. H. S. S. JOSEPH. ANNO 1752.

Dishes of this kind were frequently made in the German potteries as presents on the occurrence of marriages, births, or other family incidents, and the names on them are not likely to be those of makers of the ware.

Mutthias Rosa in ANSPACH is the signature on a table service, decorated in blue, in the Rouen style.

At CREUSSEN fine pottery of various kinds, and especially stone-wares, were made in the seventeenth and eighteenth centuries. Mr. Chaffers cautions purchasers against apostle mugs and other articles, originally uncolored, but painted in oil-colors by dealers, for fraudulent purposes.

At SCHREITZHEIM, in Würtemberg, fine wares were made by generations of the Wintergurst family, from 1620 to this century. Dishes in

the forms of animals, vegetables, and other eatables are characteristic, but these were also made at Delft and other places. The marks of this factory are uncertain. An S, with a dot in the upper curve, has been assigned to it; more doubtful, a B, and a mark including the stag's horns, fleur-de-lis, and crossed bâtons, which may be of this or some other Würtemberg pottery.

A cup and saucer of glazed brown ware, ornamented with silvered relief, is signed *G Manjack fecit* PROSKAT, and dated 1817.

At GOGGINGEN, Bavaria, about 1750, a potter began to make enameled wares, decorated chiefly in blue, with flowers, arabesques, and figures. The mark is the name in full, the initials of an artist, H. S., appearing on a specimen.

At HUBERTSBERG, Saxony, Count Marcolini, the Dresden director, established in 1784 a manufacture of salt-glazed pottery, like the English, and also copied Wedgwood's ware.

A pottery at SCHRAMBERG, Wurtemberg, reproduced Wedgwood's queen's-ware in plain white, basket, and other patterns, and also decorated with prints. The mark is the name impressed.

At HÖCHST, Mayence, pottery was made in 1720 by Geltz. The porcelain products soon became important. Its figurines, in pottery and pipe-clay, are delicious work. Melchior, the modeller, has never been surpassed in modern times in the grace and perfection of his figurines. Various objects, frames, horns, birds, medallions, etc., were produced, all of the most admirable character. The mark was the wheel of the arms of Mayence, accompanied sometimes by the initials of artists. *Zeschinger* occasionally signed at full length. The factory was broken up by the French, and ceased in 1794. The moulds passed into the hands of Dahl, who at a later period revived the work, and signed with the letter D under the wheel.

MEISSEN.—See the history of the Royal Saxon porcelain works under DRESDEN, of which the first products in brown and red ware, by Büttcher, were pottery.

LUDWIGSBURG, otherwise KRONENBURG. — A mark of this factory on porcelain is two interlaced letters C under a crown. The crown is sometimes omitted, and in that case the mark is precisely that of Count Custine's fabric at Niderviller. We believe that considerable faience thus marked should be restored to Ludwigsburg. M. Jacquemart describes a piece, violet-marbled ground with a medallion, the eagle of Germany, the crossed C's, and date 1726, which was before the time of Custine.

At ARNSTADT, Gotha, pottery was made about 1750. *F. G. Fiegel* was

a decorator in 1775, his name appearing on a jug. A mark, two pipes crossed with three dots, has been attributed to this factory by Marryat.

MARBURG had an ancient pottery of the sixteenth century, and work has been continued to modern times.

A porcelain factory at FRANKENTHAL, founded by Paul Hannong when compelled to leave Strasbourg in 1754, made faience also. His son, Joseph Adam, succeeded him in 1759. In 1761 the crown took the works. The Hannong marks of Strasbourg ware were used here on pottery.

At TEINITZ, in Bohemia, well-decorated faience was made by WELBY about 1800, who signed his name in a wreath.

At STRALSUND, Pomerania, from 1738 to 1788, very beautiful faience was made by a potter named Giese, with colored relief ornaments, and good paintings of flowers.

At WÜRZBURG, in 1726, two persons made in unglazed pottery an immense number of imitations of shells, vegetables, and animals, even bees and flies, so admirably done as to deceive some of the learned. The fraud was aided by their ingenuity in burying them, where they caused them to be discovered by Louis Hueber, who regarded them as rare fossils, and published an account of them at Würzburg in 1726, with twenty-two pages of engravings of one hundred and eleven specimens.

At ULM, Würtemberg, Rummel, a potter in 1780–1800, made statues representing the inhabitants of all conditions in proper costume. They are esteemed as artistic works. Many which were portraits from life are possessed by families.

VII.—SWITZERLAND.

In Switzerland, as in Germany, much of the oldest enamelled pottery is in stoves. The indications are that the art was derived from Germany, and possibly at first practised by German potters. Fragments of Swiss stoves were found in the ruins of the castle of Sogren, destroyed in 1499. Stove tiles in the Library collection at Zurich seem to be of the thirteenth or fourteenth century. These were found in excavations in the city. M. Demmin says Caspar Meyer was a potter at Zurich, born 1522, died 1593; father of the painter and engraver Dietrich Meyer, whose portraits of illustrious Switzers are well known. M. Demmin has a specimen which he attributes to him, a dish on a foot, enamelled and painted in polychrome; the subject, Joseph sold by his brothers, the figures in Swiss costumes, giving a droll aspect to the scene. The piece is dated 1592, and signed W.

At WINTERTHUR, from an early time stoves were made of the best art

character. Mr. Lubke, who has published a treatise on these stoves, describes a number of them, and gives the signatures of makers found on them. These are:

H. E. A. M. I. T. 1647.	1653, H. H. A.
Hans Heinrich Graaf zu Winterthur, 1668	David Pfau and Abraham Pfau on one stove.
A monogram of H. E., supposed to be Elias Ehrhardt.	H. P.
L. P., 1620.	Ortmar Vogler Haffner in Elgg, 1726.
1636 D. P. (probably David Pfau).	D. S. (David Sulzer).
Hans Heinrich Pfau	Hans Jacob Da . . ker Hafner Ao, 1724.
H. B. (Hans Brennwald[?])	Johannes Reiner, Maler, 1729.
	Hoffman pinxit 1757.

The Pfau family were extensive workers, their names appearing on many stoves. The relief subjects in these tiles are largely taken from the engravings in the emblem books, so popular in the seventeenth century, and also from the engravings of Tobias Stimmer, Dietrich Meyer, and his son Conrad.

The ancient records of Winterthur preserve a long catalogue of potters, from 1641 down to 1758, including many names not found on extant work. The last of the Pfau family, David Pfau, died in 1850. Other works in pottery came from these various makers, but are probably classified with the products of other countries.

At Freiburg, Neuchâtel, Luzerne, Basle, Lausanne, and elsewhere in Switzerland, stoves were made, and doubtless other works in pottery.

VIII.—BELGIUM.

In 1696 there was a fabric of pottery at TOURNAY which was regarded as important. Nothing is now known of its products. Before 1741 it is supposed that Pierre Joseph Fauquez had a pottery here, which he left on his death that year to his son, Pierre François Joseph. After the peace of Aix-la-Chapelle the works passed into the hands of one Peterynck. The products are not distinguished from those of Delft.

At LUXEMBOURG the brothers Boch established a factory in 1767, which has continued to the present time. Its work, in various kinds of faience, as well as porcelain, has been of the best class.

At TERVUEREN, near Brussels, works were commenced about 1720. A vase, with flowers in relief and the arms of Charles of Lorraine, Governor of the Netherlands and protector of this factory, has a mark, CCC, under which are the letters C. P.

IX.—HOLLAND.

DELFT, the town in Holland which has given to the English language the word *delft*, synonymous with domestic pottery, as china is synonymous with porcelain, was for long time the most important seat of potteries in Europe. From a remote period it is probable that the excellence of the clay had made this a place for the manufacture of earthenwares. When the Dutch East India Company brought Chinese porcelains into Europe, the first great impulse was given to the potter's art. Men began to admire the newly imported wares, and to accept them as substitutes for the old pewter and wooden dishes from which they had eaten. The first porcelains brought to Europe were the blue and white. Pontanus, in his "History of Amsterdam" (1611), tells us that in the importations to Amsterdam no other color appeared on porcelain, and he seems to have supposed no other was produced in China. The Delft potters, aroused by the new demand for household pottery in Chinese style, at once began to produce imitations of it, in their best styles—styles which rapidly improved until without exaggeration they could claim to make wares which in lightness, enamel, and beauty—in fact, in all external respects—equalled the imported porcelain, and was so cheap as to be within the reach of moderate purses.

All kinds of Oriental wares which came to Holland were imitated, and when, later, polychrome decorations were brought out, these were copied and imitated with great fidelity. Coarser and more common wares were made, but the enamel was equally good, and the decorations, if less careful, were yet in good color and effective. Every form of faience was produced. Bottles in innumerable shapes, vases, services of table ware, plaques for decoration, tiles for chimney-pieces, even violins and other strange products in pottery, were made. The glaze was in general of a bluish tint, and sand was mixed with the clay to give strength and hardness to thin articles. The Delft wares went into commerce, and were sent not only through Europe, but to the East and West Indies. Before the end of the seventeenth century thirty distinct potteries were at work in Delft. Potters went from here to England and taught the art.

Services were made in the forms of animals and vegetables with great skill. It was a favorite custom with wealthy Germans to have a room expressly set apart for the show of faience. "This room represented both kitchen and dining-hall; a tile stove, walls covered with tiles, shelves full of dishes, a table set out for dinner with a service of every possible article.

For such rooms these delft services, with dishes in the forms of their contents before cooking, were well calculated.

When tea and coffee came to be used in Europe in the latter part of the seventeenth century, tea and coffee pots, and cups and saucers such as we now use, were for the first time made. Whether the teapot is a European invention of that period, for "drawing tea" in the European fashion, or had been made before that in China, does not appear. Teapots of European fabric, said to be as old as 1620, are of course not so old.

Delft wares in the shape of fruits, fish, etc., are known with dates as early as 1540. Inscriptions are known on many specimens, one dated 1547. Eminent artists decorated Delft pottery. Ter Himpelen painted fairs and marine subjects, about 1650. Peit Viseer was noted for colors, 1750. Van Dommelaar, 1580, painted Chinese landscapes, dragons, butterflies, etc., in gold, red, and yellow. Ter Fehn, 1590, was a modeller, producing statuettes. Jan Asselyn painted landscapes, generally in blue, about 1640. Abraham Verboom, 1680, painted landscapes. Jan Steen, 1650, painted figures, a plaque being known with his portrait. Jan Van der Meer, 1632, was also a painter of Delft wares.

The story is told that a Delft manufacturer had four daughters, about to marry four ceramic painters on the same day. His workmen made four violins of pottery, and at the marriage feast, the artists and workmen of Delft being assembled, the four grooms played on the four violins, while others played on various instruments made of the same ware. These four violins were preserved in the families. Whether this be or be not true, four such violins are now known in collections in Europe. Champfleury (an author, and a collector of ceramic art) has written a story, "Le Violon de Faïence."

In a wine-shop in the village of Lekkerkerk is one of the most celebrated works of Delft, a painting of a famous giant of the eighteenth century on pottery, eight feet high.

America abounds in specimens of Delft, many of quite early times. Our Dutch ancestors in New York, on Long Island, and on the banks of the Hudson, ornamented their chimneys in the seventeenth century with



136. Delft Plate. Blue decoration. (T.-P. Coll.)

Delft tiles, on which usually Scripture subjects were painted with more or less skill. Many of these old fireplaces remain in position, but many more were broken up when the old houses were removed to make way for modern structures. English potters afterward produced tiles in imitation of the Delft ware, and numerous old houses in this country, especially in New England, were decorated with these. It is generally impossible to distinguish the English from the Dutch.

The French factories at Rouen made wares in close imitation of Delft, and Delft in turn imitated the Rouen, so that many specimens exist which may with equal probability be assigned to either of these factories, or for the same reason to Belgian and Flandrian factories, or even to the English potters, who produced table and other wares precisely resembling the Delft. Such specimens the judicious collector will not trouble himself to assign to any one factory, but regard as illustrations of styles of art which were popular and common to the several localities in the seventeenth and eighteenth centuries.

The potters of Delft were accustomed to use names, and probably sign-boards or emblems, distinguishing their potteries. At the Hôtel de Ville these names and designations were registered, together with the marks used by the potters on their wares. No records exist prior to 1628. M. Demmin has given an extensive list of marks found at the City Hall, most of which are from a record of 1764. In some cases the distinctive sign appears on the pottery. Thus, Dirk Van der Does assumed the Rose; and a rose is sometimes on his work, with his initials. Justus Brouwer, an extensive manufacturer, designated his pottery as "the porcelain hatchet," and an axe or hatchet marks its products. The various marks which are known, as well as those of a large number of unknown manufacturers, will be found in their place in the accompanying Table of Marks.

Wares of a heavy pottery, usually decorated in blue, sometimes in other colors, were made at AMSTERDAM from 1780 to 1785, under the management of a man named Hartog, who was also known as Hartog Van Laun, and his associate, named Brandeis.

At OVERTOOM, in 1754, a factory belonging to Van Haeren and Van Palland made good enamelled wares, table services, vases, groups, birds, and other pieces. It ceased in 1764. Specimens are rare. No mark is known. The materials were bought and transferred to Weesp, where they were used in founding a porcelain factory.

At HORDA, Gaberil Vengobeechea made faience plates, coarsely painted, signed with his name in full.

X.—SWEDEN.

The manufacture of faience was not introduced into Sweden till the eighteenth century. At KUNERSBERG, Helsingburg, Gothenburg, and perhaps other localities, potteries have existed: but we know little of any except the two principal factories, at or near Stockholm, of RORSTRAND and MARIEBURG.

At RORSTRAND the manufacture was established about 1727 by a company. The early fabrics were in the styles of Delft, or with reliefs and flowers, in violet, yellow, and other colors. Rorstrand is a suburb of Stockholm, and some pieces are marked with the name of that city.

In 1750 the MARIEBERG factory was founded, nominally by Count Carl Scheffer, but doubtless by the Queen Louisa Ulrika, possibly moved by the prevailing royal taste of the times, especially that of her brother, Frederick of Prussia, who robbed Dresden to enrich the Berlin factory. Both pottery and porcelain were made, and the work was often of high class. The faience was painted by good artists. The jugs, teapots, and other objects were ornamented with rustic or twig handles and flowers in relief. The grounds were sometimes of a nankin color. In 1759, Dr. Ehrenreich became proprietor, and continued the works till 1780, when they were closed.

At GUSTAFSBERG, near Gothenburg, about 1820, Godenius, a potter, established works and made pottery services, decorated in blue and gold. He also produced very beautiful Parian wares. The mark is GUSTAFSBERG, with an anchor, and is printed on Parian ware in a scroll pattern.

XI.—DENMARK.

Pottery was made at COPENHAGEN in the early part of the last century, but the history of the factory is not known. It is probable that the porcelain factory also produced faience.

KIEL.—The potteries of Kiel are celebrated for their beauty. Fine paste, delicate moulding, and excellent painting characterize them. Subject paintings are well executed, with a finish that gives them a decided charm. On a large bowl in mitre form, painted with two subjects, of a party drinking from a bowl of the same form, the lid decorated with lemons and fruit, is a signature of the director, *Buchwald*, and the artist, *Abr. Leihamer*. Specimens are described, painted in bright green, with touches of black and of gold.

XII.—RUSSIA.

We may look with interest to future investigations into the history of the potteries of Russia. At present little more is known than the fact that stoves made of enamelled tiles abound in Russia, and are of early date, and that ancient tiles without glaze, having ornaments in relief, are preserved in a museum at Moscow. Many of the old churches of Moscow have, in their external architecture, painted bricks, glazed or enamelled green and yellow, which date probably from the seventeenth century. About 1700, Peter the Great brought Delft potters to Russia; but although they doubtless made stoves and other wares, the art does not seem to have prospered to any great extent. Beausobre, an author cited by M. Demmin, states, in 1773, that faience was made in good taste at St. Petersburg at that time, and also mentions a pottery at Revel. An English writer, also cited by M. Demmin, in 1779 describes a great number of "china" pharmacy pots in a drug-shop at Moscow, which he had seen, and which were enamelled with the arms of the czar. He probably used the word "china" carelessly, and these may have been the work of the Delft potters of Peter the Great.

In Tooke's "View of the Russian Empire" (London, 1799), we are told that black earthenware pans were common in Russia, but glazed wares rare. Pottery was then made at CONSTANTINOVA, ARAT, and VASSILLIEVA.

Cream-colored wares and other potteries have been made at and near KIEV.

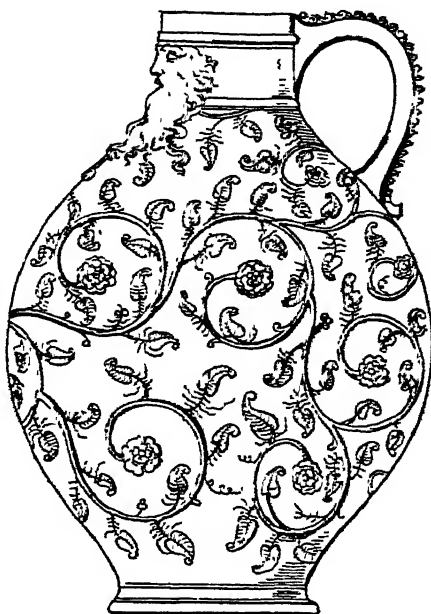
XIII.—GERMAN GRÈS CERAME.

Stone-wares form one of the most extensive departments of ceramic art, especially in table wares for ordinary use.

The stone-wares of Germany are of peculiar interest from their antiquity and beauty. A large number of the factories already mentioned as producers of faience also made stone-wares of the two classes, common and fine. Every one knows common stone-ware. Gray or brown jugs, drinking-mugs, crocks, pitchers, and other coarse potteries used for ordinary domestic purposes, are the most familiar illustrations. But common stone-ware, if made by the hands of an artist, rises into the realms of beauty, and may rival works in more costly material. Fine stone-ware differs from the common only in the superior composition, quality, and fineness

of the paste of which it is formed. In either case it is made of clay and sand, baked densely, glazed usually with salt, stands fire, and even strikes fire on steel.

The name *Grès de Flandres*, formerly applied to white stone-wares, is erroneous. None was made in Flanders. A great deal was made at Cologne, Coblenz, Neuwied, and elsewhere on the Rhine. Stone-wares in general were made at these places, and also at Ratisbon, Baireuth, Grenzhansen, Kreussen, Bunzlau—in short, throughout Germany and in Holland. The forms were many—jugs, mugs, and dishes in various patterns. The ornamentation is either in relief or engraved, reliefs of different merit and character. A very common form was the jug which, from the bearded head of a man on the neck opposite to the handle, is called the Graybeard. To this, in England, in the reign of James I., was given the name *Bellarmino*, in ridicule, it is said, of Cardinal Bellarmine; but the connection is not exactly clear, unless possibly the cardinal was very fat and had a large beard. These graybeards varied in size. We have one which is fifteen inches high. This is the largest size. They were made as small as six inches high, to hold a pint. The ornamentation, besides the bearded face, varied greatly. Arms were often impressed on the side. Rows of medallions, bands with inscriptions, mottoes, various relief decorations, are found. These were largely imported into England. But the graybeard was perhaps the least ornamental form of the decorated stone-wares. Cans or mugs were made covered with ornamentation in relief, or impressed so as to produce relief, in arabesques, sometimes enclosing figures, in beautiful bead and scroll work; apostle mugs, a low, large mug, with the apostles in niches surrounding it; flat circular bottles; jugs in rings, and in double rings, one at right angles with the other; in short, an endless variety of forms, all more or less beautifully ornamented on the surface. Sometimes the surfaces were



137. German Fine Stone-ware Jug (Huyvetter Coll.)

ornamented with colored enamels, producing an odd but very effective result. The costumes on these, and the dates occurring on some, show



138. (Gres Cannelle. (Marrat Coll.)

that they were chiefly of the seventeenth century. Among the most beautiful are those of fine stone-ware, cream-colored, the surfaces covered with engraved or relief work. The modern reproductions of the stone-ware of the seventeenth century are now so common that most persons are familiar with the great variety of forms, colors, and decorations which in the seventeenth century were prized by the wealthy as well as by the poor frequenters of ale-houses in Germany and England.

To nothing more properly than to these mugs and jugs of grès cérame can be attributed the wonderful art education of the German population. In our own time, to our shame be it spoken, in America, the artisans to whom we apply for home decoration are in vast majority Germans.

There is no race of men who so much contribute to the artistic tastes of the world as the German races. For our ornamental furniture, for our wall-painting, for our upholstery, for our decorations of almost every kind, we depend largely on German workmen. Their ability and taste are due to the fact that the German workman and his ancestors for generations have been accustomed to artistic work in their most common utensils of ordinary life, and in nothing more than in their pottery. The utilitarian says that beer is just as well drunk out of a plain mug as an ornamental mug; but the German of the seventeenth century thought it pleasanter and more profitable to drink his beer from a mug whereon there were lessons of beauty in art, and the result has been that his descendants are the art purveyors of the world. If Italy in the fifteenth century produced works in majolica which the wealthy collector of our day is willing to possess at fabulous prices, it must be remembered, however, that that splendid art had no beneficial effect, produced no results on succeeding times. The high prices paid for old German stone-ware jugs are more justifiable, at least in this that they were the educators, directly and indirectly, of generations of men in the seventeenth, eighteenth, and nineteenth centuries, and that to them, in some degree, we owe the practical union of beauty and utility of our own country and period.

If we could pause here and there in the dry history of an art to dwell on the stories which are connected with it, we should swell the work to many volumes. It is said that Jacqueline of Hainault, daughter of William IV. of Holland, young, brave, and beautiful, Duchess of Brabant by marriage, after successive contests with John of Bavaria, her husband of Brabant, and Philip of Burgundy, when she had retired, a prisoner, to the Castle of Teylingen, in 1436, amused herself by making stone-ware mugs, which she threw into the castle moat, saying that hereafter they would be found and thought relics of antiquity. Whatever of truth there be in the tradition, it is certain many cans or mugs have been found in the moat, plain stone-ware mugs, without decoration; but it is also true that



139. Apostle Mug. (Marryat Coll.)

these were made in various parts of Holland, and that it was an old custom at feasts to use such mugs, one for each guest, which were never used again. They are, however, called *Jacoba-kanetjes*, and a treatise on the "*Vrouw Jacob's kanetjes*" was published at Arnheim in 1757. Even in France they are called *Jacquelines*; and in Flanders they call by this name all stone-ware bottles with large bulbs, and also those which we call Tobys, in form of a seated woman.

Stone-ware was made early in the sixteenth century at Ratisbon, where the mark of Jerome Hoppfer (an inferior engraver on copper) appears as a designer, and perhaps maker, of moulds. David, Jerome, and Lambert Hoppfer were three brothers, all artists, none remarkably successful, if we are to judge from their works; and all alike used for a mark between their initials a little hop-vine, which some mistake for a candle. The best work for future ages which Jerome did was on pottery. The apostle mugs came, mostly, from Crenssen. Mention has been made of a common style of fraud, in some modern dealers, who paint in oil-colors and sell Crenssen apostle mugs which were made in plain stone-ware.

At the Huyvetter sale a grès céramé jug was sold for one hundred pounds. This was a rare and extraordinary piece. A white jug in the Bernal sale brought forty-four pounds ten shillings; a blue-and-white jug thirty-seven pounds; other stone-ware specimens of less importance, from two to nineteen pounds.

The modern reproductions of ancient stone-ware which abound, and

the superb works of modern factories in original designs, are not within the scope of this volume. The varieties of stone-ware from time to time produced in England by makers of pottery and porcelain are of much interest. Many of these were made by potters who went from the Low Countries to England, and it is not always possible to determine whether a stone-ware jug is of English or Continental fabric. The potteries at Fulham, making these wares, began the history of artistic work in England. The Elers brothers, coming from the Continent to Staffordshire, brought with them the method of making the admirable scroll and other relief decorations of the Grès, and introduced the style on their red wares at Bradwell. These wares of the Elerses evidently impressed the mind of Josiah Wedgwood, and, it is quite likely, led him to direct his attention almost exclusively to the production of relief ornaments, and thus the German cans had illustrious progeny in the superb works of Etruria. Nor did their influence cease here. The common classes of stone-ware in England were improved under the impulse given to manufacture by the Elerses, were brought to great perfection in Wedgwood's day, new pastes were from time to time invented, and at length the stone-wares of England became (what they still remain) the rival of porcelain in utility and beauty.

PART III.

PORCELAIN.

I.—CHINA.

NEITHER tradition nor history gives any critical account of the origin of the making of enamelled pottery or porcelain by the nations on the Pacific. The Chinese authorities state that pottery was invented in the reign of Hoang-ti, who, according to Chinese chronology, ascended the throne 2698 B.C. Ancient Chinese chronology is no more accurately determined than the Egyptian. This date, however, is not far from what might be expected, if, as is probable, the first descendants of Noah who reached the Pacific Coast made pottery. It has always been among the first of the useful arts, practised by men in all conditions of comparative civilization. This is about the date of the arrival of the first settlers in Egypt.

The invention of porcelain is dated by the Chinese authorities in a period extending from 185 B.C. to 87 A.D. But again there is uncertainty, for it does not appear that the Chinese have ever distinguished porcelain as translucent pottery. On the contrary, the word *yao* in Chinese applies equally to porcelain (in our acceptation of that word) and to enamelled metals, and possibly to other articles covered with enamels fixed by fire. Hence this statement of the date of the discovery of porcelain must be accepted with doubt. It may be the date of the introduction of enamel on pottery. The earliest "porcelain" is described as of coarse heavy paste, and may have been the same general class of ware made by the Persians. The Chinese had established extensive commercial relations with the Arabian coasts at an early date. Their ships crowded the Indian Ocean, and it is stated by one author that as many as four hundred Chinese trading vessels were at one time in the Persian Gulf, loaded with perfumes, spices, gold, copper, and porcelain. An Arabian manuscript of one Suleiman, a merchant, describes the Arabian vessels as trading with China in the ninth century. At the same time the intercourse overland between

Eastern Iran and Mongolian China was probably constant. It is well known that at a comparatively late period the Chinese derived from the

Arabs the blue of cobalt, previously unknown to them, and also the art of enamelling on metals. These debts to Saracen art point to a possibility that at an earlier period they had learned from the West how to make translucent pottery. They have never been distinguished as inventors, but always as imitators. For the present, however, the invention of translucent pottery is credited to China.

It is of course possible that the tribes who went eastward after the Deluge discovered the art of enamelling pottery. But it is more probable that they derived it through Central Asia from the enamels of Assyria and Babylonia. No specimens of very ancient enamelled potteries of China are known, even among the



140. Chinese Vase, decorated with lacquer and flowers, in color.
(Jacquemart.)

antiquarians and collectors in that country, who have for some centuries been numerous and enthusiastic. We have older examples of Saracen work, by several hundred years, than of Chinese. Until, therefore, further discoveries of old Chinese art lead to a different conclusion, it may be regarded as probable that the Chinese learned this art from the nations of Central Asia, to whom it had descended, through Assyria and Babylonia, from Egypt.

The enamelled potteries of China give place in interest to the porcelains. The porcelain paste in effect seems to have largely taken the place of pottery in China, and has been used for some centuries for all classes of ware, common and fine, cheap and expensive. The pastes vary in purity, and are, in coarse jars and wares for rough uses, almost opaque, while in the delicate classes they are like gems in translucidity. So, too, many of the most gorgeous colors of the Chinese are placed on bodies of heavy and dirty paste. The massive bricks and ornamental architecture of the celebrated tower of Licouli were porcelain.

The manufacture of porcelain has been for several centuries carried on in various districts of China by private makers, while also the Government has conducted the royal factories at King-te-tchin. Chinese gentlemen have long taken great interest in the art, and private collections are numerous. Books are published on the subject, for the information of all who desire to study the history.

The oldest known Chinese work treating of ceramic art was first issued in 1325, entitled "Feou-liang Hien-tchi," a description of the district of Feou-liang, in which King-te-tchin is situated. M. Stanislas Julien says that this work passed through twenty-one editions. He found in the Imperial Library at Paris an edition of 1823. It was doubtless revised and extended from time to time, as quotations from it refer to modern European commerce. This author commences his history at a point in the Wou-te period of the Thang Dynasty, about 621 A.D., when, he states, for the first time the Government directed its attention and laws to this industry.

Another Chinese work on the subject is entitled "Thao-Choue," or Dissertations on Porcelain. It was written by Tchou-thong-tch'ouen between 1736 and 1795, and is divided into six books, discussing the present state of the art and the special products of various periods.

A third Chinese work, entitled "King-te-tchin Thao-lou," or Porcelain History of King-te-tchin, was published in 1815 by Tching-thing-kouei. This work contains most of the important matters in those previously named, and cites various other authorities not known to Europeans. It is a methodical account of porcelains, in chronological order, commencing with the vases of Ngeon-youei, the eastern part of Ngeon, in the third century of our era, and continuing the critical history of Chinese products by periods down to the nineteenth century, with elaborate accounts of the processes of manufacture. This work M. Julien has translated into French, and from it and its accompanying papers and notes the body of our present knowledge of the history of Chinese ceramic art is derived.

None of the works give any facts concerning the origin of enamelled pottery or porcelain. The essential to hard-paste porcelain—the only kind known to the Chinese—is the clay to which they gave the name *Kaolin*, from the mountain with similar name, near King-te-tchin, where it abounded. The fact that this earth, in combination with a peculiar stone—*pe-tun-tse*, felspar—under a great heat produces a translucent object, was a discovery of unknown date by an unknown person. We have no specimens of the earliest Chinese work, either in pottery or porcelain; nothing, indeed, which can be depended upon as genuine of an older date than the fourteenth, or possibly the fifteenth, century of our era, except, perhaps, the small bottles found in Egypt and elsewhere, to be hereafter described. Pieces are frequently found which bear dates as early as the King-te period, 1004–1007; but no reliance is placed on their genuineness.



141. Chinese Vase. Height 20 inches.

Marryat. (Fortune Coll.)

The following information, which we take from M. Julien's translation of the work of Tching-thing-kouei, being section 119 of the fourth book, is very clear on this point:

119. KHIEN-LONG-NIEN-THANG-YAO.

(*Porcelains of THANG-KONG made in the period Khien-long—1736–'95.*)

These are porcelains of the imperial factory, made under the direction of Thang-ing, an officer attached to the Department of Interior Affairs (that is, affairs of the imperial palace). Thang-kong established himself in the manufacture in the sixth year of Yong-tching (1727). At this time there was an adjunct director named Nien, who enjoyed a great reputation. At the commencement of the reign of Khien-long (1736) he was charged with the control of bridge tolls in the district

of Hoai. In the eighth year (1743) he was sent to Klicou-kiang to over-see the operations of the customs. These two together directed the porcelain works. Thang-kong knew thoroughly the nature of earths or clays, and the different kinds of fire. He introduced great care in the choice of materials, so that the vases which were made under his care were all "*d'une finesse, d'un éclat et d'une pureté parfaits.*" He knew how, besides, to imitate all the most celebrated antique porcelains, and never failed to give them the same degree of elegance and of beauty. He imitated also all the most celebrated kinds of enamels, and reproduced them with rare skill. Nothing was wanting to the perfection of his porcelains. Nor is this all: he introduced newly in the work a multitude of ingenious processes; to wit, 1. (Enamel) violet of Europe; 2. (Enamel) blue, called Fa-sing; 3. Vases with grounds of burnished silver; 4. Black-enamelled grounds; 5. The shining black of Europe; 6. The manner of painting with enamel, Fa-lang-hoa-fa; 7. Black grounds with the enamel of Europe; 8. White flowers on a black ground; 9. Designs in gold on black ground; 10. The sky-blue porcelains (*bleu-de-ciel*); 11. The enamel which changes in the firing.

These vases were made with a white and fat clay. There were of them both thick and thin, but all of a gleaming tone (*d'un ton luisant*). At this epoch the products of the imperial manufactory had attained the greatest perfection.

In addition to this, Chinese authorities unite in stating that all the more ancient works were exactly reproduced during the Ming Dynasty (1368-1647). We know that the modern manufacturers in China and in Japan reproduce with considerable skill the works and the marks of all former periods. The history of King-te-tchin abounds in descriptions of the reproductions of old styles in every successive period. It is quite plain that a collection of Chinese porcelain cannot be satisfactorily arranged by dates.

The collector may well dismiss from his mind all anxiety on this subject, contenting himself with the choice of specimens which illustrate the variety and beauty of color for which the Chinese porcelain has its great renown. To pay a large price for a specimen because bearing an old mark, or guaranteed by the opinion of an expert to be old, is highly absurd, if another specimen, equally good in color, without mark or guarantee, can be purchased at a cheaper rate. The more experienced judges of Oriental porcelain freely acknowledge, in numerous colors and kinds, the impossibility of determining periods of manufacture, and it may well be doubted whether there is any person in China, Europe, or America who, upon examining specimens of certain exquisite colors, can decide whether they are of the Ming Dynasty, or of the eighteenth century.

Since, then, it is often impossible to classify Chinese works by periods,

or to make collections illustrate the history of a progressing and changing art in the far East, collectors are left to divide their specimens according to colors and styles of decoration, and such aid as the marks found on them (frequently forged) may supply.

The oldest Chinese porcelain was probably either pure white, sea-green, a blackish blue, or white and blue. Decoration in various shades of blue has always been a favorite style in China, as among the Saracens and in Europe.

Blue has always been the transmission color in the art of enamel. The favorite Egyptian color was blue. The few enamelled wares of the Greek fabric, learned from Egypt, were blue. The same color prevailed in Assyrian, Persian, and all Saracen decoration. The Spaniards gave the name *azulejo* to all wall tiles from the common blue color. When the Florentine laboratory invented the Medicean porcelain, it was decorated in blue. When France discovered the art, blue was the chief color used, and the king afterward reserved all other colors to the sole use of the royal factory. When hard-paste porcelain was invented at Dresden, blue was the decoration color for years. Was the color delivered from nation to nation with the art, in old times as in modern?

Many collectors of Chinese and Japanese wares confine themselves exclusively to fabrics decorated in blue. Such collections are of great beauty, and are apt to contain specimens of high antiquity. The first allusion to porcelain in Chinese literature speaks of it as green. We do not know precisely what this color was, or whether the word translated green means any shade of that color known to us. It is, however, supposed that the color was what we now call green *céladon*.

A very remarkable class of small porcelain vases, or bottles, found in considerable number in Egypt, has attracted attention because of the idea, which for a long time prevailed, that they were found in ancient tombs, and therefore indicated the great antiquity of porcelain manufacture in China. Rosellini reported the finding of one in an Egyptian tomb whose date was little later than 1800 B.C. Since that time many have been found in the possession of Arabs in Egypt, who profess to have discovered them in tombs. Several have been found where no doubt can exist of their



142. Chinese Bottle found in Egypt.

great age. Mr. Layard found one (III. 146) in the mound at Arban, but in a position giving no clue to its exact period. General Cesnola found

two buried in the loose earth while excavating at Idalium, but not in a tomb. We have three in our collection, obtained in Egypt from Arabs—two at Thebes and one in Cairo. The New York Historical Society has in the Abbott collection seventeen, obtained by Dr. Abbott at various times in Egypt, but no record exists of their place of discovery. Specimens are in several European collections.

The discoveries by Mr. Layard and General Cesnola are evidence of considerable antiquity. But, aside from other considerations, the character of the porcelain in some, if not in all, of these indicates antiquity, and they may be regarded as relics of that abundant trade existing between the Arabs and the Chinese in the eighth and ninth centuries.

These bottles are not of uniform shape or style of decoration. Twelve in the Abbott collection and two in our own are each about two inches high, shaped as shown in the illustrations (142-146). The material is a heavy paste, roughened on the surface with coarse granulations. Some are red, others yellow. The flat sides are always plain white, a few flowers on one in red or black, or both colors, and a legend on the opposite side in black or red. These vary a trifle in size. One, in the Abbott collection, is smaller than the others, a flat oval without handles, pure white, with flowers in red, and no legend.

A rare form and description is that of one in our collection, obtained at Thebes, and two in the Abbott collection. The shape is a flattened amphora, with handles extending from the neck to the body; the paste coarse, like the others; the enamel a pale-green celadon, with sprigs of flowers slightly embossed in white—a very ancient Chinese style. One in the Abbott collection is similar in size and shape, the enamel dark starch-blue, and another is of the same color, but a half-inch smaller.



144. Chinese Bottle found in Egypt.



143. Chinese Bottle found in Egypt.

All these objects have characteristics of the most ancient porcelains described in the Chinese works. None are reported as discovered anywhere except in countries inhabited by Saracen races. They have probably contained perfumes, of which the Arabs have always been ready purchasers.

M. Julien has discussed these curious specimens with much erudition, and abundantly established the impossibility of their age being so great as the error of Rosellini attributed to them. He describes the various styles of writing used by the Chinese, and shows that the inscriptions are in a character which was invented by a eunuch of the palace under the Emperor Yuen-ti (48-33 B.C.), and which, by reason of its abridged and rapid form, came quickly into general use. Mr. Medhurst, the distinguished English interpreter, long resident in China, examined the inscriptions on some specimens, and believed them extracts from known authors. One, he says, is from a poet who lived between 713 and 741 A.D., and is translated "The radiant moon gleams in the midst of the pines;" another, from a poet of about the same date, "The flowers are opening, and behold a new year."



145 Chinese Bottle found in Egypt

Considering the very commonplace character of such sentences, and the peculiar form in which they appear, in two or three Chinese characters, there may be some reasonable doubt whether these remarks are original with the poets to whom they are attributed. In fact, some one else may have said the same things.

It has been stated that precisely similar bottles, with similar legends in the same old character, are now made in China. This may be correct; but we have been unable to verify it, or to procure from China any specimens. The fact would, however, not militate against the theory of the great age of the specimens found in excavations by Mr. Layard, General Cesnola, and others, since the Chinese have always reproduced their ancient fabrics in such constant succession that identity of form and decoration has been well preserved. It is remarkable, however, that no single example has been described as brought to Europe or America by the great East India companies or the merchant traders of the past two centuries, or by travellers, among the immense variety of wares which have been introduced, and that specimens are not abundant in collections.



146. Chinese Bottle discovered at Arban.

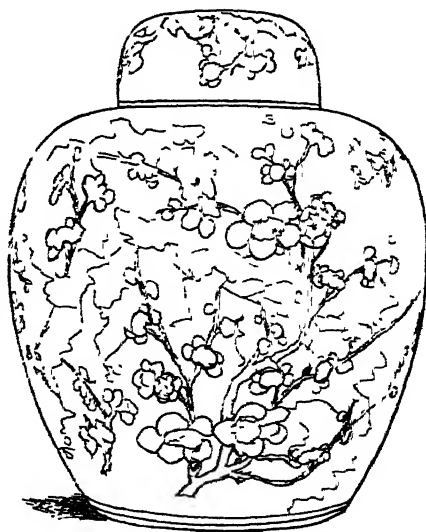
Mr. Layard, in his account of the Nestorian Church at Zerin, said to be the oldest church of the Nestorians, describes a remarkable collection of porcelains which it is greatly to be regretted he could not examine carefully.

Among the objects which first attracted my attention were numerous Chinese bowls and jars of elegant form and richly colored, but black with the dust of

ages. They were suspended, like the other relics, by cords from the roof. I was assured that they had been there from time out of mind, and had been brought from the distant empire of Cathay by those early missionaries of the Chaldean Church who bore the tidings of the Gospel to the shores of the Yellow Sea. If such were really the case, some of them might date so far back as the sixth or seventh century, when the Nestorian Church flourished in China and its missions were spread over the whole of Central Asia. The villagers would not, in the absence of their bishop, allow me to move any of these sacred relics. The sister of the Patriarch, they said, had endeavored to wash one some years before, and it had been broken. Hung with the china vases was the strangest collection of objects that could well be imagined. Innumerable bells, of all forms and sizes, many probably Chinese, * * * porcelain birds and animals, * * * all brought at various periods by adventurous inhabitants of the village who had wandered into distant lands, and had returned to their homes with some evidence of their travels to place in their native church.

If these objects are indeed Chinese, and not Persian porcelains or pottery, they are an interesting illustration of the travels of Chinese fabrics many centuries ago, and are probably among the earliest works of that people which have been preserved from destruction.

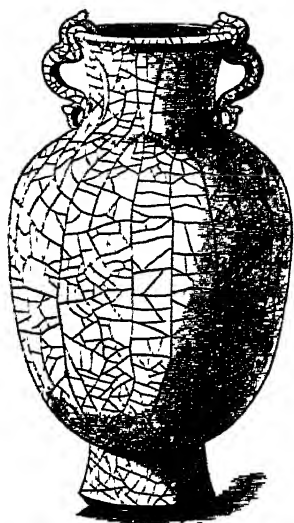
From the date of the invention of porcelain in China, according to Chinese authorities, the progress made in the art seems to have been slow. Under the Tsin Dynasty (265-419 A.D.) the porcelain was blue in color, and was held in great esteem. About 583 A.D., potters in the district now including King-te-chin were ordered to make porcelain for the use of the emperor, and to bring it to the capital. This command raised porcelain into the rank of the higher arts in China. Under the Soui Dynasty (581-618) we read of green porcelain which was made to take the place of some species of glass which is unknown, and the art now spread throughout the empire. The work of one Thao-yu is celebrated as receiving the name "artificial jade," which we may conjecture to have been in pure green celadon, which resembles closely some of the prized shades of jade. The Chinese have always been fond of comparing por-



147. Chinese Vase. Dark-blue ground, with white flowers. (Avery Coll.)

celain with jade, and it has doubtless been the ambition of potters to justify this comparison which led them to the production of some of the most remarkable colors. The porcelains of Ho-tchong-thson (621 A.D.) celebrated under the name Ho-yao, or porcelains of Ho, were renowned for the purity of their white, again called brilliant as jade. M. Julien (who is our constant authority) finds no potter of distinction from the seventh to the tenth century. The porcelains of Tch'ai (the Emperor Chi-tsung) made from the year 954 are celebrated, especially from the often-repeated story that when asked for an order for porcelain by a potter, he replied, "Let the porcelain for the palace use hereafter be blue as the sky that one sees through a break in the clouds after rain."

Among the various exquisite shades of blue on Chinese porcelains, collectors have differed, and are quite at liberty to differ, in pointing out the special shade resulting from this order. The Chinese, however, had a shade which they called Yu-kouo-thien-tsing, "blue of the sky after rain," which they used in obedience to the command. The resulting works were, say the authors, "blue as the sky, brilliant as a mirror, thin as paper, sonorous as a Khing, polished and gleaming, and were distinguished as much by the delicacy of the veins, or of the crackle, as by the beauty of the color." In after-times these specimens were not to be found, and whoever could procure fragments of them used them as ornaments of ceremonial head-dresses, or, stringing them on a thread of silk, wore them as a necklace.



148. Sea-green Crackle Vase.
Height $17\frac{1}{2}$ inches. Marryat.
(Fortune Coll.)

Two brothers at this time, the elder Sing-i, the younger Sing-eul, were celebrated porcelain-makers, the elder being the more distinguished. His porcelains went down to fame as Ko-yao, "porcelains of the elder brother." These were of fine quality, thin, blue, both pale and deep; the enamel, elegantly crackled, had the appearance of eggs of fish. But the most highly esteemed were his vases of rice color or pale blue, whose enamel was perfect. The younger brother also produced work for fame, and his pieces were also blue, both pale and deep. The pale blue was always more highly valued by the Chinese, and of this maker pale-blue vases whose enamel was, as it were, studded with drops of rose-color, are specially noted.

No sketch of Chinese potter-artists can be complete without mention

of Chu-ong (the venerable Chu, or old Chu) and his daughter Chu-kiao (the pretty Chu), who lived in the Song Dynasty (960-1126), and were perhaps the most renowned of all. The father excelled in curious objects,—birds, beasts, etc.; while the daughter, who excelled her father, produced exquisite works of all kinds in all colors. Her vases always sold for more than their weight in silver, which would not indeed now be esteemed a high price for ceramic art of the best class, but was doubtless then regarded as an extravagant rate. But tastes differ in China as elsewhere, and the author of one of the Chinese works on porcelain condemns the products of Chu and his daughter as coarse and not worth admiring.

In all these early annals of the art we find constant mention of reproductions of the ancient work. In the Yuen Dynasty, Pong-kium-pao was a potter so celebrated for his reproductions of the ancient vases of Ting (618-907), that they were known by the name of “new vases of Ting.”

All the works of all these wonderful artists of China, concerning whose jade-like products the Chinese writers are eloquent, have disappeared. While it is possible and probable that specimens exist, and may even be in our Western cabinets, they cannot be identified. We have specimens made during the Ming Dynasty, when all previous works were abundantly copied and reproduced. This dynasty lasted from 1368 to 1649 A.D. Its porcelain products were brilliant, and good specimens are of high value.

In the fifteenth century we first begin to hear of porcelains ornamented with pictures of animals, landscapes, polychrome flower, and other decoration. Lo, a potter (1426-'35), excelled in painting combats of crickets; and two sisters—Sieou the greater, and Sieou the younger—engraved similar cricket-fights in the paste. In 1465-'87, Kao-than-jin decorated jars with hens, chickens, and peony flowers.

In the Tching-te period (1506-'22), a governor of Yun-nan obtained for the first time from the Mohammedans the blue of cobalt, and its effect was immediately visible in the porcelains. This new color received the name Hoéi-tsing, or Hoéi-hoéi-tsing, which we are told means “blue of the Moslems of the barbarous Western countries.” It was so costly when first obtained that an ounce was worth two ounces of gold. The emperor having ascertained



149. Chinese Vase. Blue dragon decoration. (Avery Coll.)

that it would stand the firing, ordered its use in the royal factory. The workmen stole the precious pigment and sold it to outside manufacturers. "Its color," says the Chinese authority, "was of an antique tone and great beauty. Hence, among the porcelains with blue flowers of the Tching-te period there are many greatly prized." It is not known what had been previously used for blue, but it was probably an inferior form of cobalt.

Tsoui-hong was a distinguished maker in the Kia-ting and Long-king periods, extending from 1522 to 1572. He imitated old work. His wares were sought with great avidity by his contemporaries.

Teheou-tan-ts'ouen (1567-1619) was a potter of Tchang-nan, and one of the most renowned in Chinese history, his works commanding enormous prices. He specially delighted in the reproduction of the rarest specimens of old times, and his imitations deceived the most skilful Chinese lovers of the art. Of him the story is told that he one day called on a distinguished officer, and asked permission to see a rare tripod vase of white porcelain of Ting, which was an ornament of his cabinet. He held it a short time, took an impression of the crackle with a piece of paper concealed in his hand, and measured its size with hand and eye; then hastened home. Six months after, he called on the officer, bringing a fac-simile of the old vase, which on comparison showed no shade of difference. The cover of the one perfectly fitted the other. The officer was astonished, bought the imitation at three hundred francs, and placed it by the side of the original, making a pair.

At this same period lived Ou, "the hermit Ou who lives in solitude," as he signed himself. His name was Hao-chi-khieou, and he was originally a poet, writer, and painter. He retired to a solitary life, where he made exquisite porcelain which he signed with his self-given title. He made cups of egg-shell ware, red and white, and pale blue vases, in imitation of the old wares of "the elder brother" and others.

From 1662 to 1722, the imperial factory, under the direction of Thang-in-siouen, made excellent porcelains, thin, brilliant, of various colors, the most celebrated of which were the serpent-skin green, the yellow of the eel, the azure, and the yellow-spotted. From 1722 to 1735 the products were equally fine, many being produced in "egg-color, which was brilliant as silver," blue, and other colors. As we have before seen, the period following (1735 to 1795) was the most brilliant in the history of the imperial factory, when, according to Chinese authorities, the work attained its greatest perfection. In the present century Chinese ceramic art has greatly declined, until within a few years, when indications of a revival are abundant. Is this due to the fact that Western nations demand

higher art? And is not this demand due to the taste for collecting the finer works of old time?

Let us now examine some of the varieties of Chinese porcelain.

OLD WHITE.—The white unpainted porcelain has been esteemed in general very old. It is now reproduced with great skill. It was made in early times, and constantly during the Ming Dynasty (1368–1661). The white wares of Hiu-tcheon, during that period, are highly praised, and white statuettes of Buddha have since that time been a speciality of the factories of Te-hoa. Small white “altar-cups” of the Emperor Chintsong (1573–1619) are named as of great beauty, as also shallow white cups of the same period, which were sold and became “the fashion.”

A Chinese author says, “The potters who devote themselves specially to making vases called Pe-ting (white), such as *coupes*, cups, bowls, plates, etc., make, besides, a multitude of small objects of vertu, fine and common. In all the manufactories there is no potter who does not make them.” And yet few readers of this have ever seen a vase, cup, or plate of pure white Chinese porcelain without color decoration. Specimens are rare, and good old examples of beautiful paste and fabric are highly prized.

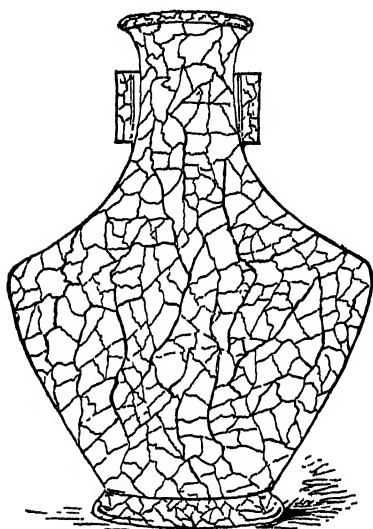
Two quite distinct varieties of old white porcelain are known. The one has a brilliant glassy surface, is exceedingly pure in paste and tone, sometimes ornamented with delicate tracery of fern or other leaves in a white of slightly different shade, occasionally with the Greek meander pattern. The other variety is usually more creamy in color; pieces are ornamented with raised work, are perforated, sometimes engraved. The old white is rarely found except in small articles—statues of gods, sacred animals, birds, kylin, the dog Fo, and cups or vases beautifully ornamented in high-relief. The paste and enamel of both varieties are exceedingly fine, and specimens are rare. The modern imitations have not hitherto reached the brilliant purity of the older specimens.

CÉLADON.—This name applies specially to articles covered with a delicate sea-green enamel, which varies in purity. It is also given to articles whose ground is of this color, with ornamentation in other shades, and to a variety also called starch blue. The sea-green is by some supposed to be the oldest color decoration of the Chinese. This and also the starch-blue occur on the bottles found in Egypt. Specimens are ornamented with geometric lines, figures and flowers in relief, and with designs made by engraving the paste and filling in with paste of a lighter or deeper tone. The latter is *céladon fleuré*. Panels on vases have sometimes human figures and other ornamentation in blue, or in relief of blue and white. Modern *céladon* is abundant, but seldom so delicate in tone as the

older work. Very old specimens are found, of which the body is coarse, heavy paste, resembling hard pottery. Some of the bottles found in Egypt are of this class.

CRACKLE.—This decoration, consisting simply in subjecting the surface enamel to a process which cracks it more or less according to will, is a puzzle to the taste of Western nations. The Chinese have admired it for a thousand years. We find that in their accounts of the ancient porcelain, fragments of which were prized as jewels, they speak of the delicacy of

the crackle as a distinguishing feature. It is in vain to dispute about tastes. If the polished Greek, possessing glass, preferred to drink at feasts from the heavy black kylix of earthenware, surely the Chinese have right to their admiration of the cracked surface of porcelain. Possibly the taste originated in the old look which it gave to a new article. They have made crackled ware in all times down to the present; and in very large objects the crackle has some effect. To an ancient gray vase (Ill. 150) in our collection, which is 22 inches high, and 16½ inches in largest diameter, the cracked surface gives a certain cyclopean effect.



150. Gray Crackle Vase. Height 22 inches.
(T-P. Coll.)

The process of making this surface has been managed by the Chinese with wonderful dexterity. They made the cracks more or less numerous, larger or smaller, on all the surface, or left uncracked medallions and portions at will. The crackle is produced, according to Père D'Entrecolles, by the use of a surface paste, in which steatite forms a component part, and the hot piece being plunged into cold water, this surface paste at once cracks. Color is then rubbed in. In other cases the vase, fixed in a frame, is heated at particular spots and suddenly cooled, producing local crackle. This explanation does not suffice to explain the dexterity with which the operators seem to have determined at will the size, style, and extent of the cracks. We have found in several broken specimens that each vase has a core of paste different from the surface paste, and through which the cracks do not extend.

The most minute variety is called *truité*, from its fancied resemblance

to a trout's skin. The final glaze usually covers the cracks; but on large objects the glaze sinks into them, and they are perceptible to the finger-nail.

BLUE.—This color was used by the Chinese from a very early period, and the taste of the West agrees with that of the East in admiring it, whether used as a ground-color covering the entire surface, or contrasting

with the white on which it is laid. Chinese artists employed it for their most elaborate pictures, and a great variety of subjects are illustrated on old pieces. Various shades of blue are found; but it is questionable whether any specimens can be verified as of the oldest va-



151. Cup of Sacrifice (Avery Coll)

rieties, made before the introduction of pure cobalt at the beginning of the sixteenth century, although many are supposed to be of that class. The varieties of blue porcelain may be thus stated: 1. The common blue of Nankin wares; 2. A soft clouded blue, supposed to be the "blue of the sky after rain;" 3. The turquoise; 4. The lapis lazuli; 5. The blue fonet-té; 6. The soufflé. Varying shades add numerous varieties to these. The turquoise is very rich, and old specimens have always commanded enormous prices. This color has in all times and countries attracted admiration, and has never, in any instance, been more exquisitely produced than by the inventors of enamel, the ancient Egyptians. But the Chinese excel all nations in the variety of the shades. A rare color is a shade which when placed by a blue object appears distinctly green, and when contrasted with a green object seems certainly blue.

It is of course impossible to define in words the shades of color which are specially prized by collectors. But no eye, if only half educated, will fail to select, among the varieties of Chinese blues, those which are peculiarly charming. None, however, were produced in China finer than the colors of modern Europe. Some of the old Staffordshire crockery of 1810 to 1825 was superb in blue, equalling or surpassing the Chinese tints of the same class.

Blue-and-white porcelains, familiar to every one in table wares, are justly prized when fine in color. Nothing is more delicious in nature or

in art than this combination. No other class of the Chinese has so great a variety of picture decoration. It is in every form and style. Flowers, figures, groups, dragons, monsters, appear in vast variety. The quality of the blue color varies, and the value of specimens varies with it. A rich clear blue on a pure white ground is always fine. Sometimes a pale yellow or Nankin color is introduced, usually on fine pieces, producing an odd effect, but not adding beauty. The modern imitations of the old blue and white are fully equal to them in color; but the modern style of drawing is different, and in general affords means of determining its age.

But it is quite impossible to separate the unmarked works of different periods before 1800 A.D. Many specimens classed as Chinese are probably of Persian fabric, and many others are decorated in Persian styles for that market.



152. Chinese Vase Blue and white. Height 22 inches. (T.-P. Coll.)

The first importations of Chinese porcelain into Holland were decorated in blue only, and it would seem probable that for some time no others were brought to Europe. Pontanus ("Rerum et Urbis Amstelodamensium Historia," Amsterdam, 1611) describes the very large porcelain importations of the Dutch East India Company. In a discussion of the question whether these porcelains were the *vasa myrrha* of Pliny, he quotes the description of this author, and admits a certain resemblance, except in the matter of colors, wherein Pliny describes the marvellous beauty and variety of tints which characterized the myrrhine, "and,"

says Pontanus, "what Pliny calls colors are not seen on the porcelains of our time, which, so far as I know, have only blue mingled with white."

The other blues, which cover the ground, vary in shades and in methods of application. The turquoise is applied chiefly to smaller objects—vases, birds, figures, dogs, kylin, fish, etc. Engraved fern-leaves, meander, and geometric patterns are found on this as on other colors. The lapis lazuli is often relieved by gold and arabesque patterns. The foug   rarely covers entire pieces in the old work, but leaves medallions or spaces for other decoration.

POLYCHROME.—M. Jacquemart has suggested a division of the polychrome decorations of Oriental porcelains into three classes: (1) *Chrysan-*

themo-pæonienne; (2) *Green*; and (3) *Rose*; giving the names on account of the predominance of the chrysanthemum and peony in the first, and of the respective colors in the second and third. This classification, however, is practically useful for only a comparatively small number of specimens. A very large portion of the most beautiful polychrome wares cannot be placed under either head. There are many pieces, however, which possess these characteristics. A large variety of beautiful wares is marked by the predominance of a soft lead-colored blue, united with iron-red and gold. Teapots and services are found in these colors, as well as vases, and the combination of color is one of the least glaring and most charming in Chinese decoration. The rose color, varying to carmine, is generally used as a thick enamel. It is rarely found as a ground-color on pieces which are not laboriously decorated, and few varieties command as high prices. The subject paintings—scenes from Oriental life, history, and drama, found on pieces which are backed with rose color—are generally very carefully painted, and grounds of exquisite arabesque ornamentation in colors surround them. The ruby, the deepest of the rose colors, is very rare.

In solid colors, some of the deep reds have been highly esteemed. The liver colors, of different shades, are curious, and reproduced in quantity at the present time. Some of the old shades, however, seem to defy imitation, especially one in which there is an iridescence or a lustre of exceeding power. Specimens are of the highest rarity. One in the collection of S. L. M. Barlow, Esq.—a vase which has a well-known pedigree in China—is perhaps without a rival.

The list of reproductions at King-te-tchin, hereafter to be given, will furnish the reader with a very complete catalogue of other noted colors.

The Chrysanthemo-pæonienne pieces have more or less rich flower decoration on white grounds. For we cannot include in this class those on blue and other grounds, some of which are among the rarest and most brilliant of porcelains. Nor can we class here but a few of the specimens decorated with landscapes, birds, insects, figures, and groups, an infinite variety of designs, with more or less intermingling of flowers. Some uncommon old specimens have game-cocks standing among branches of brilliant flowers, and these birds are painted with more freedom of touch than most Chinese works. The marvel of Chinese decorations is often the absence of all semblance of reality in colors of objects, while the combined effect is delightful. A small service in our collection illustrates this. Each piece, large or small, has the same decoration. A large duck is in deep chocolate brown, his feathers gold. He stands on a rock, which is

brilliant and pure rose-color. By him stands a vase of soft turquoise blue, holding flowers of deep claret, pale rose, lemon yellow, brown and gold, with leaves of green. The rock and the vase are supported on a large acanthus-leaf of *bleu-de-roi*, veined with green and black. Such decorations cannot be classed by any predominating color.

The green predominates in pieces which are decorated with religious, historical, hunting, and other subjects, but these are intermingled with the same decorations and colors found on other wares.

The yellow wares of China have an inexplicable reputation in Western countries, growing, perhaps, out of a statement made by some early travellers that the exportation of the "imperial-yellow" porcelain was forbidden. There are several varieties of the yellow, from a pale straw-color to a deep, dirty orange. They are decorated variously, by engraved lines only, and by colored reliefs and paintings. They are not so rare as some of the blues and other colors, and are reproduced at the present time by the Japanese in great perfection. Even some of the old varieties are condemned by the taste of the Chinese. A frequent phrase occurs in the Chinese books, "enamel of secret colors," defined as colors reserved for the royal use. It nowhere appears what they were, and they probably varied from time to time, the reservation being only temporary.

We have spoken thus far of color decoration chiefly. It remains to add that the Chinese made beautiful reticulated work, in vases and table wares; they made the "grains-of-rice" work in which small holes through the paste of the bowl or cup were filled with the translucent enamel. They decorated vases with lacquer in gorgeous colors, leaving porcelain surfaces brilliantly painted, or with lacquer inlaid with shell in patterns. They made imitations of bamboo-work in colors; and figures, groups, dragons, dogs, fish, parrots, images of gods and men, decorated in all kinds of colors.

European pictures and Greek mythological pictures were introduced to the Chinese by the Europeans in the seventeenth and eighteenth centuries, and were copied by them in their peculiar style on their wares for European markets. We have an egg-shell tea-service decorated in ovals with a picture of Diana and Endymion, which is grotesque. While the Chinese are called a nation of copyists, they are not close copyists, and could never reproduce a European picture so as to deceive even an experienced eye.

It is said there was a peculiar porcelain of China called *kia-tsing*, which is white until filled with liquid, when decorations, usually fish, were seen. Père D'Entrecolles says that in his day (1712) the art of making it

was lost, but he describes what he understood to be the process. On the inside of a thin cup the fish were painted, and when dry a coating of very thin paste of the porcelain was laid over, and over this an enamel. Then the outside was ground off as thin as possible without touching the paint, and enamelled by dipping, and the whole then baked. It is not clear how this would produce the described effect, nor do we know of any specimens of this peculiar decoration.

Egg-shell porcelain is among the delicate products of China, now imitated in several European factories. It was made by enamelling a vase or cup on the inside, baking, then grinding down the outer surface until the paste was practically removed, leaving the inside thin enamel to stand as the body of the vessel, while another thin enamel was placed on the outside. It was made first in the Yong-lo period, about 1425, and perfected about 1465. Good specimens are rare. They were beautifully decorated in the richest colors.

The porcelain tower of Licouli, near Nankin, no longer exists, having been destroyed in the Tae-ping rebellion. Tradition says that the first tower was one of eighty-four thousand towers erected about 833 B.C. It was destroyed, and rebuilt 371-'73 A.D., and again destroyed, to be rebuilt by an emperor of the Ming Dynasty, 1431 A.D. This last structure was about 330 feet high, overlaid with enamelled bricks of brilliant colors. Many superb fragments, in the Metropolitan Museum of Art, attest the splendid blue, red, green, and yellow colors, and the purity of the white. These massive pieces are of porcelain paste, with ornaments in relief, bold and richly enamelled.

It has been remarked already that porcelain factories abound in China, scattered in various districts. The private manufacturers have rivalled the Government works at all times. King-te-tchin, the city or borough of King-te, has been since the sixth century a noted seat of potteries, owned by private potters. Among these the Government works were established, in the first years of the Ming Dynasty, its furnaces scattered among the private works. The porcelain industry at King-te-tchin was without parallel in the world. From the fourteenth century the whole town has been under a special superintendent and governor appointed by the Government. Upward of three thousand furnaces were at work there thirty years ago; but in the Tae-ping rebellion the city was nearly destroyed, and we have no late information of its condition. The story is told of it, as of Chelsea, in England, that in early times merchants crowded at the opening of the furnaces to rival each other in purchasing. Much of the porcelain made here was sent in white condition, to be decorated

for foreign markets at Nankin and at Canton. The Nankin decorations are in general superior.

The pottery of China has attracted less attention than the porcelain, but is no less remarkable. It has always been made for ordinary uses. Fountains, flower-pots, water-jars, lamps, and various domestic utensils are made, and many are enamelled in brilliant colors. Pottery teapots are preferred to porcelain in China. Stone-wares, red, and of other colors, have been made for ages. Some of these come to us in the form of pickle and preserve jars, and occasionally these furnish specimens of the rarest colors in enamel.

Chinese gentlemen are lovers of old porcelains, and pay even higher prices than the most extravagant of Western collectors. Counterfeits abound, intended to deceive them. Modern European factories counterfeited their own ancient work and marks, and it is not strange that the same motives impel the Chinese to the same frauds. Even in 1712, P^{re} D'Entrecolles says that his friend the Mandarin of King-te-tchin made counterfeits of the old celadons for presents to his friends. And this was before the days of the great director Thang, in whose time the royal factories reached their highest perfection.

Perhaps no more instructive matter can be given to the modern collector than is contained in the sixth book of the Chinese work translated by M. Julien, which gives a catalogue of the ancient porcelains reproduced at King-te-tchin, and some of the new inventions of Thang. From this will be seen how great is the difficulty before the collector who desires to determine the antiquity of his specimens of Chinese porcelain. The catalogue begins with reproductions of ancient porcelain vases in enamels on iron and copper bodies, which are classed with porcelains. After these come enamels on porcelain bodies.

5. White enamels, white as flour.

6. Enamel of Kiun, including four kinds newly invented: *a*, red, color of a precious stone; *b*, red, color of the Japan pear blossom; *c*, violet, color of egg-plant; *d*, blue, color of a plum; *e*, color of a mule's liver; *f*, color of a horse's lungs. The four newly invented colors are: *g*, a new violet; *h*, rice color; *i*, sky-blue; *j*, enamel which changes color in firing.

7. Enamel red of two kinds—one lively, one (perhaps) of red jasper.

8. Enamel blue and deep red imitating porcelains of 1426-'85, having surfaces like orange-skin or like little buds of the flower of the tsong tree.

9. Enamel of the imperial porcelain, three kinds: *a*, yellow of the eel; *b*, green of serpent's skin; *d*, spotted or stippled yellow.

11. Enamel blue of the East; two kinds—pale and dark.

12. Enamel of the *Song*, rice color, and pale blue, copied from fragments found near the ruins of an ancient factory.
13. Enamel green of oil, like ancient vases called Yao pien.
14. Enamel Lou-kiun-yeou (a changeable blue with veins and waves).
15. Enamels of Ngcou, red and blue.
16. Enamel stippled blue.
17. Enamel moon-white without crackle, on white body, without veins; it is of two shades—pale and off-color.
18. Imitations of vases of 1426-'35 of four kinds, severally marked on the bottoms with the signs for three fish, three fruits, three mushrooms, the word "happiness" thrice repeated.
19. Enamel blue, shining like a gem—a new invention of four varieties, distinguished by the four marks in No. 18.
20. Enamel called Fei-tsoui, of three kinds: *a*, uniform blue; *b*, stippled blue; *c*, blue stippled with gold.
21. Enamel red soufflé (the color applied by blowing it through lace on the end of a tube, scattering small bubbles which burst and leave thousands of minute bubble lines).
22. Enamel blue soufflé.
23. Imitations of vases of the Yong-lo period; *a*, those in which the body is removed, leaving only the enamel (commonly known as egg-shell); *b*, the white vases without color of 1403-'24; *c*, chased or engraved vases.
24. Reproductions of porcelains of 1506-'21, and of 1573-1619.
25. Reproductions of porcelains of 1465-'87.
26. Vases with flowers on yellow ground.
27. Enamel "in blue method," discovered by recent experiments; *a*, like the "sky-blue after rain;" *b*, like the thick red; *c*, like the deep blue.
28. Vases imitating the European, with figures in relief, chiselled or moulded.
29. Vases pale yellow and pale green, with flowers engraved in the paste.
30. Vases pale violet, with flowers, and with flowers engraved.
31. Vases of all kinds of enamel with engraved flowers.
32. Vases of all enamels with flowers in relief.
33. Imitations of ancient red vases.
34. Yellow vases of Europe.
35. Violet vases of Europe (a new invention).
36. Silvered vases, and gilded vases (a new invention).
37. Vases black as ink, with colored enamel (a new invention).
38. Vases decorated with ink designs, dark or pale, mountains, water, figures, flowers, plants, birds, quadrupeds (a new invention).
39. Imitations of porcelains of 1426-'35, white grounds with paintings, thick and thin, large and small.
40. Imitations of the blue flowers of the porcelains of 1521-'66.

41. Imitations of the lightly sketched blue flowers of the Tching-hoa period.
42. Enamel rice color, pale and dark, differing from the old of the *Song*.
43. Vases with red enamel (*Yeu-li-hong*); either completely covered with the red, or having green leaves or red flowers. (This is not paint, but red enamel, which runs down in thick masses.)
44. Imitations of the enamel *feuille-morte*; two kinds—red and yellow.
45. Vases pale yellow, with enamel ornaments (a recent discovery).
46. Imitations of the pale-green porcelains; two kinds—plain ground, and with engraved flowers.
47. Vases with enamels in European style, painted with enamel colors, landscapes, animals, figures.
48. Vases of all enamels with flowers.
49. Imitation of the enamel *Ou-kin*, or mat black; two kinds—black grounds with white flowers, and black grounds with light designs in gold (a new invention).
50. Green vases in European taste.
51. Red vases in European taste.
52. Enamelled vases, mat black, in European taste (a new invention).
53. Vases *frotté d'or* (rubbed with gold).
54. Imitations of the vases "rubbed with gold" of Indo-China.
55. Silver-rubbed vases of Indo-China.

To attempt any description of the styles of decoration used by the Chinese is a waste of effort. They are innumerable in variety, and there is no limit to the extent of collections illustrating them. Among their special characteristics are dragons, kylins, the dog Fo, the spotted deer, and the fong-hoang. The dragons are various—one of the heavens, one of the hills, one of the sea. They are represented in a variety of forms and colors. The imperial dragon has always five claws, the symbol of the emperor and higher princes; while that with four claws is the emblem of princes of lower rank. The kylin, a nondescript monster with a dragon's head, is regarded with great favor as a bringer of good-luck, notwithstanding his hideous appearance, and is often modelled in porcelain, and enamelled in rich color. Turquoise kylins were once highly prized. The dog Fo is the temple guardian of the Buddhists, a favorite figure in porcelain of all periods, and appears constantly as the knob on covers, and surmounting vases. The fong-hoang, represented with long streaming feathers, is a bird of good omen, once the symbol of the emperors, and now that of the empress.

Chinese wares are sometimes marked with dates, sometimes with mottoes expressive of good wishes, with indications of the rank and quality of the persons for whose use the wares are intended, with symbolic signs,

etc. The method of dating is usually by the name of the dynasty and reign of the ruling sovereign. It is customary in China to give to each reign a name, such as "the brilliant," "the excellent," etc. So, also, with the dynasties. The "Ming" Dynasty means the "illustrious" dynasty. With the names of the dynasty and the reign sometimes occur two signs for two words—*nien* (years or period) *che* (made). Here, for example, is one of the marks of a period or reign in the Ming Dynasty.

It commences in reading at the right hand, top, and is read downward as the signs are numbered, thus: 1, Ta; 2, Ming; 3, Ching; 4, Hwa; 5, Nien; 6, Che; which is, in English, 1, 2, Great Ming; 3, 4, Ching-hwa; 5, 6, period made; and means "made in Ching-hwa period of Great Ming Dynasty." The Emperor Tchun-ti reigned 1465-'87, and his reign was called the Ching-hwa period.

化 大 1
 年 明 2
 製 成 3
 153.

Pieces having this mark, if genuine, are of that period. It will be seen that the third and fourth of these signs are the name of the period. Accordingly, in the Table of Marks we omit the dynasty signs and those signifying "period made," and give only the two which name the period. We may remark here that the porcelains having the "six marks," so called, of the period above given are more highly esteemed than any others. Those of the Yung-lo, Seu-en-tih, Kea-tsing, and Wan-leih periods of the Ming Dynasty are also prized. All these are admirably counterfeited, with the marks, in modern times. We have some remarkably fine blue-and-white specimens made (in Japan) within the past year, with the six marks of the reign of Ching-hwa. Careful examination and comparison with the marks given in the Table are necessary; for Chinese workmen were not always skilful writers, and the same mark, written by different hands, varies greatly, quite as much as ordinary English handwritings.

Another class of Chinese marks are called seal marks. These are in a character used only for such purposes, and the signs are of similar value to those in the six marks. The example here given reads, "Made in the period of Kien-long (1736-'95) of the Thsing Dynasty.

圖 記 加
 製 龍 年

154.

In these seal marks various signs are used having the same value. Potters' names and factory marks rarely occur on Chinese ware. Square marks, resembling seal marks, but illegible, are common. The six-mark dates were suspended by one of the directors in 1667, for the assigned reason that the emperor's name should not be placed where it would be subject to the degradation attending the fate of broken porcelain thrown out into waste heaps.

The various symbolic marks abounding on Chinese wares are but little understood, as we know little of the Chinese civilization. It is supposed that some forms, occurring also in the decorations of pieces, have special reference to the class of people for whom the wares were made. "Porcelain for the magistrates" is an expression in the Chinese books.



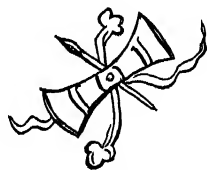
Sonorous Stone.



Outang.



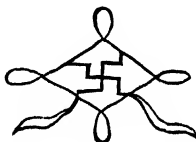
A Shell.



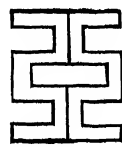
Treasures of Writing.



Pearl.



Tablet of Honor, enclosing the Swastika.



Sacred Axe.



Celosia.

155 Symbolic Marks on Chinese Porcelains.

Some of the symbols of most frequent occurrence in decorations are here illustrated. The *outang* is a leaf sung by poets and placed over divinities. Writing instruments are supposed to indicate that wares are intended for the learned. The sonorous stone, placed at temple-gates and other public places, is for judicial officers. The sacred axe is for soldiers. The celosia, or cock's-comb, is an emblem of longevity. The tablet of honor is an imperial gift to an officer. This symbol includes the *swastika* (the "sign of life"), the Asiatic symbol of old Phœnician times. Many other symbolic marks will be found in the Table.

Painted enamel cups, and cloisonné enamel vases, and other objects come to us in abundance from China. The art of making these wares enamelled on metal was learned by the Chinese from the Mohammedans of Western Asia in comparatively modern times. Our Chinese authority, writing in 1815 (M. Julien, page 35), divides them into three classes, all of which he includes under *Yao* (porcelain), and he describes all as foreign art. The first is *Ta-chi-yao*, porcelain of the Arabs, with copper body, on which are enamels in all colors. "I know not," he says, "at what epoch they were first made." The second class is *Fo-lang-kien-yao*, porcelain of Fo-lang (countries of Europe). They are also called porcelain of the kingdom of devils. These are very small pieces, enamelled in colors on copper, and were imitated in China by workmen who came from the

province of Yun-nan, and established themselves in the capital. Yun-nan was the province whose governor obtained cobalt from the Arabs, and introduced it to China. Probably this class of enamels, said to be chiefly in cups for wine, resembling European enamels, is represented by the great numbers of small bowls and cups with covers, decorated with painted enamel in brilliant color, coming to us from China. Since this author wrote, the art has been applied to many other objects, large and small.

He next speaks of a class of enamels on copper which are called *Yang-tse-yao*, or simply porcelain with enamel. "The making of these," he says, "commenced in the kingdom of Kou-li, on the shores of the western sea. No one knows when the art began." The vases are on copper bodies, very thin, covered with enamel of various colors, and ring like copper when struck. In polish, grace, and beauty they are far from equalling true porcelain. "Now," says this author, writing in 1815, "they make numerous imitations of these at Canton." M. Salvétat, in a foot-note, states that these are unquestionably the cloisonné enamels, and it would appear from this that the art of making them in China is quite modern. This Byzantine art has never been lost in the East. It is still practised in various localities. Scabbards, knife-cases, and various articles ornamented in rude but brilliant enamels, are common enough among the Persians and Arabians. The Chinese seem to have taken this art in modern times from the Mohammedans, and considerably improved its execution. The results, however curious, are rarely beautiful, although they have been popular in Europe and America, and specimens have been sold at high prices.

II.—COREA.

The manufacture of porcelain seems to have passed from China to Japan by way of Corea, and this country continued to make it until a century ago, when it is supposed the industry ceased. Corean porcelains were sent to Japan, and it is probable that more or less of them came to Europe among the early Dutch importations. It is exceedingly difficult for any but experts



156. Korean Water-pot. (Jacquemart.)

to separate specimens from those of Japan. The chief characteristic is the extraordinary purity of the white surface, which is milky, without the hard gleam of the white Japanese. Few colors were used. The red is peculiar, soft, and dead, yet very rich and beautiful. We have specimens in which no colors are used but red and green, the latter equally tender and fine with the red. Decorations sometimes include Japanese and Chinese characteristics on the same piece, and are rarely complicated in pattern. The Chinese author Tching-thing-kouei, treating of Corcan porcelains, says they are extremely delicate. He adds that those ornamented with branches of white flowers are regarded in Corea as not of the highest value. Cups in gourd form and vases in lion form are thought remarkable. No marks are known. A cup in our collection has on the bottom an embossed square, but the enamel has filled the design, if any was there, so that no signs are visible.

III.—JAPAN.

The modern manufactures of Japan in pottery and porcelain have at-



157. Japanese Plate. (Avery Coll.)

tracted more attention and are more worthy of it than the ancient. To M. Julien's account of the Chinese art is annexed a paper by Dr. J. Hoffman, of Leyden, giving a sketch of the manufactures of Japan, from which, as well as from the occasional notes of travellers, some information has been gathered on the subject. But of the history and comparative antiquity of Japanese porcelains very little is known. Dr. Hoffman's authority is a Japanese work on the most celebrated land and marine products, written by

Kimoura Ko-kyo, published at Okasaki in 1799. The fifth volume contains an account of porcelain. The chronicles of Japan locate the origin of porcelain-making at 27 B.C., when Coreans came to Japan and established works. This was not far distant from the time of the origin in China, according to Chinese traditions. The art may have passed from China to Japan through Corea. Such is the general opinion. The early works of Japan were not equal to those of the Chinese, until the year

1211, when Katosiro Ouyemou, a Japanese potter, went to China, learned the best methods in use there, and brought them back to Japan. Thereafter the Japanese fabrics advanced in elegance, until they equalled, and in many respects surpassed, the Chinese. The principal, and in general the finest, works seem to have been always those of IMARI, in the province of FIZEN, or HIZEN. Imari is the port. The seats of the potteries lie in the interior on the slopes of the mountain Idsoumiyama, from which the clay is obtained. These potteries, twenty three or four in number, have names indicating their locations, such as "The great mountain between the rivers," "The three mountains between the rivers," "Beautiful upper plain," "Middle plain," "The grotto," "Black fields," etc.

The ware of the province of SATSMA, or SATSUMA, which has been brought to America in quantity of late years, is a faience of a yellowish or dirty buff color, sometimes dingy, a close, hard paste, with fire-cracked glaze, the decorations in flowers, not brilliant, with touches and lines of gold. These decorations seem always to indicate attempts to copy European art, and are quite different in style from the old Japanese. Specimens said to be old present no evidence of age except a greater dinginess of colors, and their age may be doubted. Many of the products are very ingenious in form, and odd in effect, but the ware has little to commend it either in beauty or in national characteristics. The possessor of Satsma specimens must handle them carefully, as they are fragile, and will not stand much washing with water and soap, or hard rubbing. The collector will be guided in selections wholly by his own taste, and not by any standards of excellence. All notions of the superior beauty of this or that specimen of Satsma ware are purely arbitrary, and the novice is as good a judge of the ware as the most experienced collector.

The KAGA or KUTANI wares, usually decorated in brilliant red, with figures in black and other colors, are very effective, and by the Japanese as well as by some European and American collectors are highly esteemed. This ware is classed as porcelain by some authorities; but specimens are frequent in a coarse, hard pottery, while others are certainly porcelain.

OKOSAKI is a seat of noted manufacture, giving to the Japanese the word *mono-saki*, which is used to signify porcelain in general. It is specially renowned for egg-shell porcelain, which is now produced with all the delicacy of the ancient Chinese, but without the old splendor of enamel decoration. Either here, or elsewhere in Japan, ingenious manufacturers are now reproducing with great skill the old and rare porcelains of China, with the old marks. Reds, yellows, blues, greens, in all varieties, old celadons and crackles, Ming Dynasty blue and white with the six marks; in

short, every rare color decoration of the old times is now reproduced in Japan, and the New York market is amply supplied.

BANKO produces dark-brown and also white potteries, usually thin, without glaze, sometimes having patterns impressed, and flowers painted with enamel. A remarkable variety of Banko ware has patterns of pure white translucent paste set in the brown pottery.

BISIU produces lacquered porcelains. The *lee* of China and Japan is the gum of a tree which is cultivated for this product.

AWARI makes fine porcelains of small sizes exquisitely decorated.

HIRADSON makes egg-shell porcelains.

KIOTO and AWATA produce a great variety of wares, especially a class somewhat resembling Satsma faience, made at Awata. Kioto was the ancient capital.

Sir Rutherford Alcock describes beautiful pottery with raised decorations of fish, fruits, etc., which he found at OSACA. We also find mention of faience made at SHIBA.

Red stone-ware are among the most beautiful ce-



158. Japanese "Mandarin" Vase, decorated in gold and colors. (Jacquemart.)

ramic products of Japan. These are of fine compact paste, the color various dark shades of brick red. The relief ornaments on these wares are often very finely executed. We have ewers with the surface engraved in a marvellous imitation of bambou; tall, square tea-caddies with birds, flowers, and symbolic designs in sharp reliefs; tea-pots, round, square, octagonal, and of other shapes.

The old porcelains of Japan are usually whiter and more pure in glaze than those of China. The Nankin blue and white wares have always been largely reproduced in Japan. The Chinese and Japanese have for centuries copied and imitated each other's porcelains, so that it is practically impossible, in many cases, to determine whether specimens are of one or the other fabric. The Dutch importations of Japanese porcelain, which were very large, went into the European markets as Oriental ware, without classification, and a large portion of the specimens in our collections regarded as Chinese are probably from Japan.

It is generally supposed that the oldest known Japanese porcelains are of a rather coarse paste, the glaze bluish white, with embossed flowers colored blue and red. Others regard a thin porcelain, fine and delicate, white with slight color decorations, as the oldest. The collector, however, will find it impossible to determine satisfactorily the age of specimens, even when marked, from the fact that the Japanese reproduce all their old works with wonderful skill and exactness. Their modern products, of the last few years, surpass in elegance and perfection their ancient fabrics, and collectors will do well to be guided in selections by their own tastes, without reference to periods of manufacture.

Enamels on metal of China and Japan are not properly within the scope of this work. A very beautiful modern product of Japan is cloisonné enamel on porcelain and pottery bodies. The wires which form the cloisons are very thin, and the enamels, after baking, are polished down, as when on metal bodies. In selecting specimens a close examination is necessary, as defects are often found which have been carefully filled with wax, or some other substance, and colored. From what has been said of enamels on metal in China it may be inferred that Japanese works of this class are comparatively modern.

Japanese plates and some other articles have frequently the small unglazed spots on the bottom, where the supports held them in the baking, usually known as support marks. These are not found on Chinese wares.

When the Catholic missionaries were in Japan much porcelain was decorated with Christian subjects. The missionaries were expelled in 1641. It has been said that the introduction of this style of decoration on the porcelains led to the expulsion and the massacre of the native Christians.



159. Japanese Vase. Relief decorations. oldest style. (T. - P. Coll.)

Marks are more rare on old Japanese porcelain than on Chinese. The system of dates was similar, and the Table of Marks furnishes these. Names of factory locations and of potters are common on modern wares. Our knowledge of the Japanese marks is still very defective. The extensive lists collected by Messrs. Hooper and Phillips, and reproduced in the Table of Marks, are largely from modern wares.

IV.—INDIA.

Among the porcelains which have been brought to Europe and America during the long continuance of trade with the nations on the Pacific and Indian oceans, are many which it is found exceedingly difficult to



160. Indian Bowl. (Jacquemart.)

classify. In character of paste they resemble the Chinese, but in decoration there is so great a difference, and such marked peculiarity, that we have been accustomed to place them as of some unknown Asiatic fabric. A bowl has a soft céladon-green ground, on which from the foot rise perpendicular stalks bearing marguerites in white enamel, with

flowers and leaves in rich color branching with regularity from these perpendicular stems. On other specimens the style of flower decoration resembles that on Persian stuffs. This peculiarity of perpendicular stalks or rows of flowers and leaves is somewhat characteristic. These specimens are usually classed as Chinese, and are found more or less in all collections of Oriental porcelains. M. Jacquemart attributes them with confidence to India, and maintains the existence of a large class of porcelains, the actual fabric of that country, obtained in commerce at Pondicherry. The illustration (160) is given by him as a characteristic specimen.

In treating of Persian potteries we have already indicated the necessity for more light on the history of ceramic art in Central Asia. India, China, and Persia had early relations with one another in this fabric, and future discoveries may throw light on the nature of these relations. Glazed pottery of very ancient character has been found in Northern In-

dia, the decorations of which, in blue and other colors, are not Chinese. Old fragments of architectural work are known, enamelled or glazed, in brilliant colors, having red marguerites with yellow hearts, meander borders, columns of arabesques with flowers, trilobed leaves in foliage, fantastic birds holding reptiles, dragons' heads, a monster head, with fearful eyes, crowned with a Brahminic mitre.

The date of these is unknown. But at a later period Persian art came into India, with wall tiles, and faience resembling the Damascus wares. The history of these potteries is also in obscurity. Brongniart describes the modern potteries of Chandernagor, Karical, Calcutta, and Pegu, which are without glaze.

The common phrase "India ware" does not refer to porcelains of Hindostan. It arose from the custom of so calling porcelains brought by the East India companies to Europe; and in America, in common usage, this expression applies to the blue and white porcelains of Canton and Nankin, and Japanese products in imitation of them.

V.—ITALY.

Early in the sixteenth century, when stanniferous enamel had come into general use in Italy, the attention of the potters and their patrons was directed towards translucent wares, specimens of which were known. Their superior value, on account of the strength as well as beauty of the fabric, made it manifest that the discovery of the art of producing them would be profitable. Their composition was a mystery in Europe, nor was the material known by any distinctive name, although it was called porcelain. The finer classes of pottery made in Italy were also called porzellana. The Chinese wares had come, in occasional specimens, to Europe, and were objects of curious art, prized by their possessors, as we know from Scaliger, who mentions them among the treasures of his old family. There had been extensive trade between China and the Arabian coasts for many centuries, and the Persian porcelains were often close copies of the Chinese. The Saracens had probably introduced specimens to Italy in the Middle Ages. But they were very rare.

It has been by some supposed that the *vasa murrhina* of the ancient Romans, which Pliny (73 A.D.) described as coming from Asia, were Chinese porcelain. But he locates their origin at Caramania, in Persia; and if porcelain, they were probably of Persian fabric. It seems, however, more probable that these were cut from fluor spar, exquisite varieties of which are found in Persia, and are there carved into bowls and cups of wonder-

ful beauty. We have specimens, obtained in Western Asia, whose peculiarities of changeable color in different lights are marvellously fine. The subject has been much discussed, one of the chief points of interest in connection with it being the fact that Propertius (iv., 5) speaks of "myrrhine goblets baked in Parthian furnaces," an expression which, if we should attribute to the Roman writer a critical knowledge of the subject, would tend to confirm the theory of the making of porcelain in the heart of Asia at as early a date as in China. Some enthusiastic writers in the seventeenth century went so far as to consider the question whether the drink offered to the dying Lord by the Roman soldiers (Mark xv., 23), *ἑσμυρνισμένον οἶνον*, "wine mingled with myrrh," was not in reality wine in a myrrhine cup, basing the idea on Pliny's unintelligible statement that the myrrhine cups had a peculiar odor.

But the potters of Italy and their patrons had more interest in the commercial value of porcelain than in its history. They desired to know how it was made. Many stories had been told of its composition. Marco Polo had described the porcelains which he saw in China in the thirteenth century, and professed to relate the process of making them. He said the clay was exposed for thirty or forty years to the weather, thus becoming purified, and that those who collected it did so for their children or grandchildren. This story was varied and enlarged upon by subsequent writers. Some said the clay, others the vases themselves, were buried in the ground a hundred years. From this fable a distinguished British lexicographer was led to assign the derivation of "porcelain" to the French words *pour cent années*. But *porzellana* in Italian and *pourcellaine* in French seem to have been words for a long time applied to other potteries before they were specifically attached to translucent wares.

The Portuguese traders began to bring the Chinese wares into Europe in the early part of the sixteenth century; but before any had come from them to Italy the Italians were acquainted with specimens received from Egypt or Asia, and were seeking the knowledge of their composition.

The researches of the Marquis Campori into the history of ceramic art in Ferrara have resulted in bringing to light much interesting material concerning the first porcelains of Italy and of Europe. In an old book of expenses of the Grand Duke Alphonso I. of Ferrara, while at Venice in 1504, is an entry of Lr^e 2.3, paid *per schudelle sette de porcelana contrefacta e uno bochale a la chatalana*. Fifteen years later, in 1519, is found a letter to the duke from Tebaldi, his ambassador at Venice, which describes as accompanying it a small plate and scutella (*écuelle*?) of porcelain sent by the master from whom they had been ordered. Tebaldi

adds that the master declines to make any more, saying that he does not wish to throw away his time and his money; if the duke will furnish the money, he will give his time; but he declines to accept the duke's invitation to remove to Ferrara, *che 'l è troppo al tempo*, he is too old. From these it appears evident that the Venetian master had found the secret, and had for fifteen years made more or less porcelain. Whether it was hard or soft paste is not known. It does not appear that the duke agreed to advance the money, and the old man, the first maker of porcelain in Europe, died unknown, and the secret perished with him. No certain specimens of his work are now known. A few unassigned pieces exist, which are suspected to be either of this fabric or of Ferrara, where we next hear of the art.

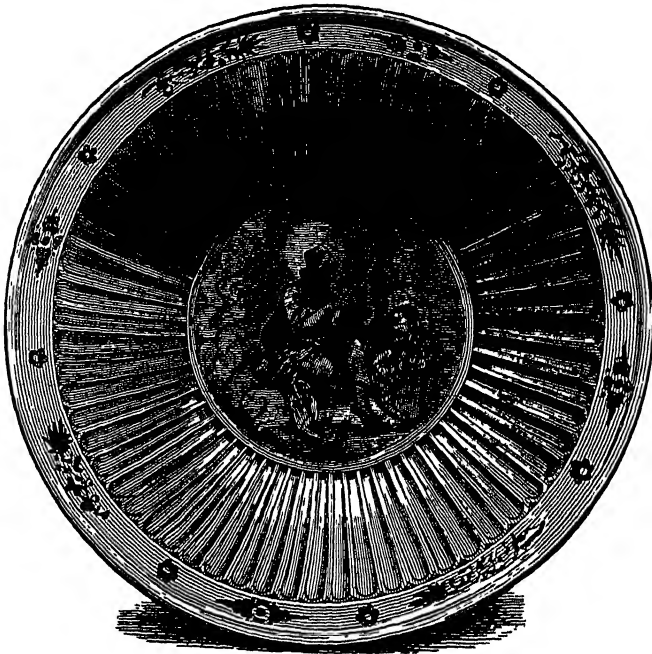
Maestro Camillo, of Urbino, an artist working at FERRARA, was killed in 1567 by the explosion of a cannon. (This of course was not Camillo Fontana.) In connection with his brother Battista, he had been engaged in seeking to make porcelain, and after his death Battista continued and seems to have perfected the process. An entry in the accounts of 1569 of extra wine for a workman preparing materials *per far porcellani*, and the apparent agreement of Italian writers of the period, and of the next century, leave little doubt of the successful result of the experiments at Ferrara. It was not till the attention of the Marquis Campori was drawn to the subject by the discovery of the Medicean porcelain that these important indications of the history of the art were rescued from obscurity.

At the same time or soon after Camillo was experimenting in Ferrara, the Grand Duke Francis I. of Tuscany had artists employed in a laboratory in FLORENCE, seeking the same result. Vasari ascribes the discovery here to Bernardo Buontalenti. A few years ago, Dr. Foresi, of Florence, had collected specimens of a peculiar porcelain, heavy, grayish in color, and decorated in pale blue, on which the mark was a dome over the letter F. Dr. Foresi's researches into the history of these specimens led to the discovery that they were the product of Florence, and a specimen was found bearing another mark, the six balls of the arms of the Medici, on each of which balls was a letter, thus, F M M E D II, signifying "Franciscus Medici Magnus Etruriæ Dux Secundus." The grand duke's experiments were progressing from 1575 to 1587, and in 1581 they were so far successful that porcelain was made.

The Medicean porcelain is classed as soft paste, because it is not a true hard-paste or kaolinic porcelain. The composition, however, includes an Italian clay which is kaolinic, and the presence of this material, as in porcelains of England, makes a resulting ware which Brongniart classed as

hybrid or mixed porcelain. Specimens are rare, only about thirty being known.

One of the finest is a large bowl, in the Castellani collection (Ill. 161), decorated in blue, and bearing the dome and F mark. The border decoration is in Japanese style. An interesting comment was elicited from Japanese experts, Shioda Mashasi and Ishita Tametake, to whom the bowl



161. Bowl: Medicean porcelain. (Castellani Coll.)

was submitted by Mr. Barnet Phillips, at the Philadelphia Exhibition in 1876. Mr. Phillips, in a valuable article on this specimen, contributed to the *Art Journal*, says:

Mr. Shioda Mashasi, who, according to the testimony of various members of the Japanese Commission, was considered as most distinguished in his knowledge of porcelain making and decoration, unhesitatingly declared the peculiar ornamentation on both pieces to be Japanese, and gave the time when such designs were in vogue in Japan, which belonged, so he stated, "to a style in use towards the middle and close of the sixteenth century, and which had long ago passed out of fashion, but which had been brought into vogue by Gorodayu Shonsui, a native of Ise, who had gone to China for the purpose of acquiring knowledge in porcelain-making, and that Shonsui had exercised his calling at Hizen, in Japan, from 1525 to 1540." Ap-

parently to clinch the matter, the Japanese expert, leaving Memorial Hall, where the Castellani collection was exhibited, went to the Main Building, in the Japanese department, and, unlocking a case containing a choice assemblage of porcelain and pottery selected for the South Kensington Museum, chose a couple of pieces of old Japanese porcelain having on them similar decorations to those on the Medicean porcelain, even to the flutings and the peculiar treatment employed in shading them. "These pieces made by Gorodayu Shonsui," said Mr. Shioda Mashasi, "are precisely like those you have just shown me. As to decoration, they are the same. This mark at the bottom of our own porcelain indicates the maker—the meaning of which is 'happiness.' There is a mistake in our catalogue, which may give rise to some error. The period of Gorodayu Shonsui is put down there as between 1580 and 1590 of your time: it should have been from 1525 to 1540. The dates I give you are positive. Your Italian porcelain-makers possibly acquired our methods of manufacture; what is quite certain is this, that they copied our old style of ornaments." A careful comparison of the pieces of Japanese with the Italian porcelain was quite convincing. The material of the Oriental piece was of better composition. The decoration, save that the Japanese work was of a darker blue, was quite the same.

Mr. Phillips adds:

We believe that the presence of Japanese in Italy may have had a direct influence not only on the ornamentation, but on the production, of this Medicean porcelain. It is well known that in 1564 numerous Christian churches existed in Japan, and that as many as 150,000 converts were made. In 1581 several princes in Kiu-shu adopted Christianity, and in this same year a Japanese embassy, led by Father Valignani, sailed for Italy, to pay homage to Pope Gregory XIII. Owing to difficulties and delays, these Japanese envoys only reached the Eternal City in 1585, and, Gregory being dead, they paid their court to Gregory's successor, Sixtus V. Quite a number of years before this, intercourse between Japan and Portugal had been frequent. Kampfer, who liked to trace race-resemblances and the affinities of people, recalls the fact that an interchange of methods of manufacture existed between the race coming from remote Indian islands and the people of Southern Europe.

This recognition of the decorations by the Japanese experts is exceedingly interesting. But we cannot agree with the suggestion that the production of the porcelain was due to immediate Japanese influence. It is probable that porcelain had been made at Ferrara a few years before the Medicean laboratory produced it. The experiments in the two places may have been synchronous. Venice had without doubt made it early in the sixteenth century. It was an object much desired in Italy, and this desire was, of course, prompted by the presence of examples of the Oriental

wares. The copies of Japanese decorations may have been made from original examples, or from copies on Persian porcelains, brought into Italy by the Saracens.

Great interest attaches to the other decoration. The centre of the bowl is occupied by a monochrome picture. This has usually been regarded as St. Mark, attended by the lion, whose paw rests on a tablet bearing the letters P G in monogram. It has been suggested that these letters are the initials of Giulio Pippi, known as Giulio Romano. He had died at Mantua in 1546, but he may have left a painting from which this is a copy. He had never, so far as is known, used these letters as his signature. The style of the work on the bowl is wholly unlike that of any painter on majolica, and it belongs to a much higher order of art than most of the majolica decorations.

At the date of this porcelain the fine period of Italian pottery was ended. A new artist here begins a new line of art, which had a magnificent succession in the porcelain decorations of Sèvres, Dresden, Capo-di-Monte, and a hundred modern factories. He was a worthy leader, for his work is very fine. Who was this first of European porcelain decorators? His style is clearly that of one accustomed to engraving, or preparing the monochrome designs which are used by copperplate engravers. For some time we believed that we had found his work, or its inspiration, in the

large coarse wood-cuts of an Italian Josephus, published at Venice, 1604. The wood-blocks in this edition are worm-holed, indicating the existence of an earlier edition. The portrait of Judas the Essene in this book has curious similarities to the figure on the porcelain. But these cuts are not signed, and do not help to any knowledge of the P. G. Next, however, we discovered the original copperplate engraving of which the picture on the bowl is a repetition. It is in a book, "Epistole et Evangeli," published at Venice in 1675, nearly a hundred years after the porcelain. This book is copiously illustrated with old copperplates, bought up for the purpose, and had



162. Judas the Essene. Facsimile of old Italian woodcut.

been preserved on our shelves only because of two of these, which we had marked as uncatalogued works of eminent engravers of the sixteenth century. One, an engraving 5 by 6½ inches, is the original of the design on the bowl in the minutest respects, only that the tablet held by the lion is blank. Again, we do not find any help to know the meaning of

P. G. The wood-cut and the copperplate are here given (Ills. 162, 163) reproduced (for the *New York Nation*) in small size by photographic process. The engraving is signed, in the lower left-hand corner, with the monogram given below, which may be either of Marc Antonio Raimondi, Giorgio Ghisi (Mantuan), Antonio of Trent (Fantuzzi), or Antonio Salamanca, a well-known dealer in and retoucher of old plates. Innumerable conjectures arise here. Fantuzzi was a pupil of Girolamo Mazzola (Parmigiano), who painted the Vision of St. Jerome, whose name he bore. Did Parmigiano paint this also? And did Fantuzzi engrave it from his work, and place it on the plate with G. P.? Did George Ghisi or Marc Antonio repeat it from Giulio Pippi? We have no doubt that one of the great engravers, or some one accustomed to prepare copies of paintings for them in mono-



163. Fac-simile of Engraving.
Original of the Medicean bowl.

W for.

chrome, executed the bowl. Raimondi was dead nearly fifty years before it was painted. Shall we fall back on Ghisi, to whom, indeed, we are inclined to attribute the original engraving?

The subject is always called St. Mark. From the position of the figure, seated on rolling clouds, from the appearance of the lion, expressing distinctly affection and companionship, and by no means looking like a mere emblem or symbol, we have suspected it to be a representation of St. Jerome, who is eminently regarded in the Church as the Father or Preacher of the Judgment. The idea receives confirmation from the position of the plate in our volume of the Gospels and Epistles, where it appears opposite to the Gospel for the first Sunday in Advent (Luke xxi.), which foretells the terrors of coming doom. Is it just possible that the letters P. G. were placed by the decorator on the blank tablet of the engraving he was copying, to say that this figure, seated on and surrounded by dark clouds and writing in a book, represents the Preacher of the Judgment, Girolamo Padre? The subject is so full of interest in the history of art that any suggestion, however wild, is worth considering.

Whoever he was, the first European artist on porcelain must for the present rest unknown with the first European inventor of porcelain, the old man of Venice, who was too old to leave home and win wealth and fame, while we pass on to a history more modern and better preserved.

The porcelain art was lost at Florence almost as soon as discovered,

and did not reappear in Italy for more than a century. The faience-makers of Castelli and Naples were producing their work, the last of the long series of Italian majolica, when Charles III. was induced to found the CAPO-DI-MONTE porcelain factory at NAPLES. That it grew out of a faience pottery is highly probable, and it is said to have produced faience. But its triumphs were in soft-paste porcelain, which it began to make about 1736. Whence the workmen derived their knowledge of the art does not appear, and it is by some supposed to have been an independent discovery, like that at St. Cloud, in France. The king took great



164. Cup and Saucer.
(Capo-di-Monte. T.-
P. Coll.)

pride in it, working with his own hands in the factory, and encouraging the production of good commercial wares for the use of his subjects. On the accession of Ferdinand IV., in 1759, the second period of the works commenced. In the annual fairs held in the palace square, a booth was devoted to the porcelain; and the king took great interest in the daily reports of sales, which were brought to him with the names of purchasers. The factory continued in successful operation till 1821, when it was closed. In 1759 it had sent a colony of workmen to Madrid to establish there the BUEN RETIRO factory.

Fair specimens of porcelains of Capo-di-Monte are not rare. Naples and the neighborhood abound in the oldest as well as the more recent work. Great quantities were produced for use in Italian houses, and are plenty in the bric-à-brac shops. The fine specimens, as of all factories, are rare. Those made in the second period, after 1760, decorated with colored reliefs, are less common, having been produced for the more wealthy purchasers. These have been extensively reproduced at Florence, where the Doccia factory, having bought the old moulds of Capo-di-Monte, has constantly made imitations, retaining the Capo mark. Dresden and other factories have also imitated them. Fine specimens, especially those decorated with colored reliefs, are costly. The latter include exquisite shell and flower work, as well as groups of figures in mythological and other scenes, which, on pieces of larger size, are exquisitely moulded, and delicately painted and gilded. On smaller objects the relief decorations are not always sharp, though invariably tasteful in color. The Doccia counterfeits are usually more gaudy, and the porcelain is thicker and more milky.

Among small pieces, especially cups and saucers, decorated only with paintings, many equal or surpass, in delicacy and perfection of work, the finest productions of Sèvres or Dresden. Considered as a whole, the

Capo-di-Monte painted porcelains, cheap and expensive, rank in taste, beauty, and artistic finish above those of any other European factory.

Large objects, especially plaques for wall use, with colored reliefs, are superb products of art, wholly unrivalled elsewhere. A room in the palace at Portici was covered with plaques painted richly, and bordered with reliefs of flowers, squirrels, monkeys, and birds. The mirror-frames and chandeliers were also of porcelain.

The stippled character of flesh-painting in Capo-di-Monte work, usually referred to as a means of identification, while characteristic, must not be depended on. We have seen fine work of this factory without the stippling, and fine Dresden work stippled in the Capo style.

Figures and groups were made at Capo-di-Monte of very great beauty. These are found in pure white, and in colors. The knobs of large table-tureens and other dishes were often in figures, and many of these are admirable specimens of moulding. The early mark of a fleur-de-lis was also used at Buen Retiro. Its form varies on different specimens. The crowned N mark is sometimes stencilled backward.

The Marquis Ginori founded a porcelain factory at LA DOCCIA, his villa, not far from FLORENCE, in 1737. It was a private enterprise, and has since remained in the Ginori family. Great attention has always been paid to the artistic character of its work, and the products have been in all varieties—vases, figures, groups, large and small, and the customary services and table wares. Accomplished modellers and artists have been employed at all times.

Long ago the factory became possessed of the Capo-di-Monte moulds, and has since reproduced the relief wares of that factory, with the mark; and, in addition to good original art, the factory has imitated various other fabrics. The early figures of Doccia, in white, occasionally somewhat yellowish in glaze, are extraordinary specimens of moulding. The products are in both soft and hard paste porcelain, and also in a hybrid porcelain, midway in paste between pottery and porcelain, called terraglia. Pieces in this ware, decorated in blue, resemble the Oriental.

VENICE.—We have seen that Venice produced the first porcelain made in Europe, so far as is now known. But the lost art was not revived till the eighteenth century. In 1726, a porcelain factory was in existence in Venice, as appears by a mark, Ven^a A.G 1726, on a soft-paste saucer, decorated with arms. This was probably the work of the Vezzi brothers, who were of a family of goldsmiths, and were ennobled by the senate in 1716. They established a porcelain factory, probably about 1726; but little is known of its work.

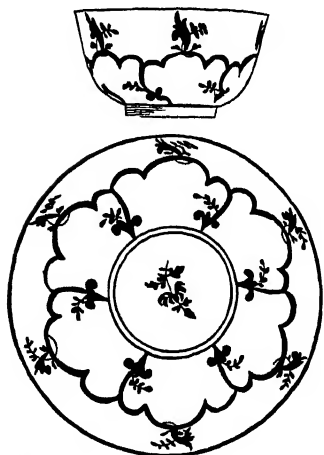
Specimens in paste of varying hardness are known, of which the decorations are frequently in red lines, forming geometric patterns, enclosing figures and landscapes. The later Venetian factory under Cozzi produced similar decorations, but Sir W. R. Drake attributes the older wares to the Vezzi, and says they have the edges, and occasionally the handles, covered with silver or platina, "producing the effect of oxidized metal settings." He also describes two cups and saucers of hard paste, the decoration resembling the best Dresden. On one of the saucers is the Dresden monogram, *A. R.*; but one cup and saucer are both marked *Ven^a*, with the letter *M* impressed, while the other cup and saucer are also marked *Ven^a* in red, and on the saucer are the letters *M. C.* over the letter *A* engraved in the paste. Other specimens marked *Ven^a* are known, with decorations in figures and flowers, birds, arabesques, etc., and this mark is now assigned to the Vezzi fabric. The peculiar red of Venice can be recognized on these, as on the works of Cozzi.

To the same factory are attributed decorations of borders in diaper-work, black and colored, with small gilt points on crosses at the intersections of the lines. These are chiefly table wares in hard paste.

The Vezzi factory probably ceased about 1740. In 1757, a grant was made to Hewelcke & Co. of the right to make porcelain, but it does not appear that they made any. In 1764, Domenico Cozzi experimented in making imitations of Oriental porcelain; and this factory, successfully established, continued till 1812. Some of Cozzi's work is remarkably fine. He made decorated copies of Oriental porcelains; his red, green, and blue, and his gilding, being specially rich. Good figures, in biscuit and in colors, were produced.

All the Venetian porcelain-makers produced both hard and soft paste. In examining marked specimens of Venice, care must be taken to distinguish the anchor mark from a similar mark used at Chelsea, in England, and at other factories.

To NOVE Antonibon brought a Dresden workman in 1752, and thereafter made hard and soft paste porcelain of high character until 1802, when the works were leased to Baroni, who also made some charming ware, but, after a few years, suspended. From 1825 to 1835, Gio. Bat-



185 Venice Cup and Saucer: Cozzi period. Decoration in red. (T.-P. Coll.)

tista Antonibon and his son revived the works, but since 1835 have made only faience.

Soft-paste porcelain was made at TREVISO in the latter part of the last century by the brothers G. and A. Fontebasso, whose marks, G. A. F. F. and F. F., occur on pieces, as also *Treviso*.

At TURIN (Vinovo), about 1770, Professor Gioanetti, or Giovanetto, established a factory of soft-paste porcelain. The marks are a cross, in the paste or in color, sometimes with V, or V N and other letters. The products were tasteful in shape and decoration.

VI.—SPAIN AND PORTUGAL.

Charles III. brought to MADRID workmen and materials from the Capo-di-Monte factory at Naples in 1759, and founded the celebrated BUEN RETIRO factory of hard and soft paste porcelains and other ceramic wares, which was sometimes called LA CHINA. Removing from Naples to Madrid, on his accession to the crown of Spain, the king, and the queen as well, seem to



166. Jardinière: Buen Retiro porcelain. (Marryat.)

have had such interest in ceramic art that they determined to foster it in Spain. The result was the establishment of one of the most noted fabrics of Europe. The director, Bonicelli, proceeded immediately to examine the earths of Spain; and so soon as the workmen, artists, and materials had arrived, buildings were erected in the Buen Retiro Gardens, under the direction of the royal architect, Don Carlos Antonio de Bourbon, who is said to have been a black slave, who had been educated by the royal family at Naples. The buildings were completed in 1760, and the work established with great secrecy, no strangers being admitted. Porcelains were soon after produced, but the exact date remains unknown. For many years no wares were sold, the factory being conducted as a royal luxury, and its products used in the palaces, or disposed of as presents. In and after 1789 the porcelain of Buen Retiro was offered to the public at a shop in the gardens, and later in Madrid; but the prices were very high, and sales not large. The great works were for royal purposes. Two rooms, one in the palace at Madrid and another at Aranjuez, are lined with porcelain plaques superbly painted and ornamented with reliefs.

Much of the earlier wares resembled the work of Capo-di-Monte; but in the nineteenth century Sèvres was frequently copied. White and colored figures were made, and imitations of Wedgwood's blue-and-white jasper wares were among the finest products.

In 1808, when the French entered Madrid, they occupied the factories, and effectually destroyed them, say the English authorities; while the Spaniards charge the final vandalism on the English, who took possession in 1812, under Wellington. The buildings were blown up by Lord Hill, on the evacuation that year. Ferdinand II. revived the manufacture at La Mancha, but the glory of Buen Retiro had departed.

Porcelain was made at ALORA in 1756, but nothing is definitely known of it. A tea-service is known with the shield of arms of Cordova, and the name *Gerona* under it, but this is by some supposed to be Chinese work. Modern factories of porcelain exist in Spain at Barcelona, Sargadelos, Seville, and Moncloa; the latter going back to 1827.

At VISTA ALEGRE, Oporto, a hard-paste porcelain factory was established in 1790 by Pintobasso, which had royal patronage until 1840. The mark was V. A., with a crown, in gold or in colors. A successor, marking V. A., without the crown, continues the work.

VII.—FRANCE.

In 1698, a family of potters named Chicanneau made soft-paste porcelain at St. CLOUD. Martin Lister, physician to Queen Anne of England, describes a visit to their works in that year, the transparency of the wares, and the beauty of the decoration. He says that the secret of the paste had been known to the proprietor for twenty-five years, but had been brought to perfection within three years past. This would fix the date of the first making of soft-paste porcelain in France at about 1695. A patent for ten years to make porcelain at St. Cloud and elsewhere, granted to the heirs of Pierre Chicanneau in 1702, recites that Pierre Chicanneau had experimented many years, and that his children had, since his death, succeeded before 1696 in making veritable porcelain.

The widow of Pierre Chicanneau married one Trou, and had two sons, Henri and Gabriel. Subsequently Henri Trou conducted the St. Cloud factory, and Marie Moreau, widow of a Chicanneau, with Dominique Chicanneau, about 1722, established works in Paris. Marryat says, "The paste of the St. Cloud porcelain is compact, and milky in color, the lead glaze vitreous, and unequally laid on, so as to become yellowish, and settling into drops. Much of the china is modelled with flowers or birds in

relief, closely resembling the white Oriental; the pieces with imbricated or artichoke leaves are well known. Others are decorated in the French style, such as the cups and saucers, with blue arabesque borders, the sides gadrooned. Colored pieces are more rare, and, unless marked, it is difficult to distinguish them from those of Chantilly, Mennecey, and Sèvres, as all four manufactories adopted the Chinese style of decoration."

While the St. Cloud factory was successfully producing porcelain, REAUMUR made experiments in Paris, designed to ascertain the component parts of Chinese and other porcelain, and produced in 1739 a ware known as REAUMUR'S PORCELAIN. This is simply glass, which after manufacture is subjected for some time to a high temperature, not up to melting heat. Under this treatment, glass undergoes a series of changes, the first of which gives it the appearance of porcelain. Reaumur's experiments are interesting, as they were directed towards the discovery of porcelain paste, as a variation of glass paste, and were conducted from that point of view, while Böttcher, at Dresden, and others sought it from pottery, as a variation of pottery compositions. Both views were right, since the composition lies midway between earthenware and glass, and is in reality earth in minute particles held up and held together by translucent glass.

In 1711, while LILLE was under the dominion of Holland, Barthélemy Dorez and Pierre Pélassier established a factory of soft-paste porcelain there. In their application to the mayor and council for leave to establish it, they stated that it would be the second porcelain factory in Europe, St. Cloud being the only other. The products closely resembled those of St. Cloud, and were long confused with them in collections. In a later application to the mayor, the founders state that the master of the Rouen factory had thought that he had discovered the secret, and had made wares which he sent to Paris for sale as St. Cloud fabrics, which were so poor that they had injured the reputation of St. Cloud, but that the fraud had been discovered, and Rouen had been constrained to abandon the fabrication. This accusation, if accepted as true, leaves a doubt whether the Rouen fabric was porcelain.

Claude Reverend, a Delft potter, removed to PARIS, and in 1664 obtained a grant to make faience, and to imitate the porcelain of the Indies. This grant has given rise to much discussion in France, and it is maintained on the one side, and denied on the other, that Reverend produced porcelain. There is no satisfactory evidence of his having done so, but many French amateurs attribute to him works and marks which are not otherwise assignable.

In 1725, Ciquaire Cirou established at CHANTILLY a factory of soft-paste porcelain, and produced articles of great beauty in every form, which became highly popular. The Chantilly sprig pattern, a small blue flower scattered over the piece, was long a favorite, and was everywhere copied. This factory continued till the French Revolution, and was revived in 1793 by an Englishman, Mr. Potter, who made hard paste and faience, imitating Wedgwood and other English wares. In 1803, a new factory was founded. The surface of Cirou's work was of a pure white, produced by the use of tin in the glaze, but the body was almost opaque.

Louis Poterat, of ROUEN, obtained in 1673 a grant for making porcelain similar to the Chinese. For this potter the invention of soft-paste porcelain in France has been claimed, but the claim is not supported. He may have produced wares in imitation of Oriental, but the chief evidence of this rests on the accusation before mentioned, made by potters at Lille, that he sold his wares as St. Cloud porcelain, injured the reputation by the inferior quality of his fabrics, and was compelled to stop their production. Specimens of porcelain are known, which M. Jacquemart and other French authorities attribute to Poterat—an attribution generally acquiesced in by French connoisseurs; but other specimens bearing for mark A. P. with a star are much disputed. The subject, which has more local than general interest, has been discussed in France, without reaching a satisfactory conclusion.

In 1735, Francis Barbin established a factory of soft-paste porcelain at MENNECY-VILLEROY, and produced excellent ware, decorated in every style and with great artistic ability. Fine figures and groups, rivalling the work of Sèvres, were made. In 1773, this factory ceased, its materials being removed to Bourg-la-Reine.

In 1740, two brothers, Dubois, workmen from St. Cloud, went to VINCENNES, and offered to M. Orry de Fulvy, Intendant of Finance under Louis XV., to sell the secret of making porcelain. The offer was accepted, and a laboratory at Vincennes assigned for them. Three years of fruitless labor and an expense of sixty thousand francs resulted in failure, and they were discharged. M. Riocreux attributed to them ware having for mark a tower, but this has also been assigned to Tournay. Experimental work was continued in the Vincennes laboratory until 1745, when a French sculptor, Charles Adam, formed a company, to which the king, Louis XV., granted special privileges for thirty years, and assigned a location for the works in the Château of Vincennes.

The early products of the work at Vincennes were chiefly flowers in porcelain and wares in imitation of Oriental. In 1753, the king, Louis

XV., became one-third owner of the works, and it acquired the title of Royalty. Madame de Pompadour is said to have taken great interest in its productions, and they were now brought to such perfection that their beauty and the favor of royalty together produced a vastly increased demand for them. Increased business required larger accommodations, and in 1756 the works were removed to Sèvres, where buildings had been erected for them.

SÈVRES.—In 1756, after the removal from Vincennes, Louis XV. purchased the entire interest and became sole owner of the porcelain works. A decree of January 17th, 1760, provided that the work should be called "*Manufacture de Porcelaine de France*," a name which has disappeared in the simple word *Sèvres*. The same decree forbade any person to make porcelain plain or painted, gilded or not, with relief sculpture, flowers or figures, except only that they might make white porcelain painted in blue in Chinese patterns. Gilding was specially prohibited in all other factories, on either pottery or porcelain.

In 1761, the secret of making hard-paste porcelain was purchased of Pierre Antoine Hannong, whose name appears in connection with the spread of this art in various places. But as this secret consisted only in the use of kaolin, and kaolin was not known to exist in France, except of inferior quality, it was a useless purchase until 1769. A lady named Darnet, wife of a surgeon of St. Yrieix, near Limoges, had found near that place some white clay, which she submitted to her husband as a possible substitute for soap in washing. He sent a specimen to Macquer, chemist in the Sèvres factory, who recognized in it the desired kaolin. The quantity was found to be abundant, and in 1769 the first hard-paste porcelain was produced at the royal factory. Thereafter hard and soft paste both were made at Sèvres until 1804. Soft paste was not made from 1805 until 1847, when it was resumed, and since that time both pastes are produced. The phrase *Vieux Sèvres* is arbitrarily confined to soft-paste wares made before the year 1800.

From the time when the king became sole proprietor, the Sèvres factory has always employed the highest skill in the art, both in the modeling and in the decoration of its products. Hence a long list of artists, eminent as Sèvres decorators, whose works are sought as eagerly by lovers of porcelain as are the works of other artists on panel and canvas by their admirers. Boileau was director from 1760 to 1773; Parent succeeded him, but was discharged in 1779, for selling factory works for his private benefit. Regnier succeeded Parent in 1779, and continued to be director until imprisoned by the Republicans in 1793. A commission of

three members of the convention then superintended the affairs, Chanou being in immediate charge, and thereafter Salmon, Etlinger, and Meyer were joint directors until 1800, when Brongniart became director. Alexander Brongniart is one of the most distinguished men in ceramic history.



167. Sèvres Vase: gros bleu. Height 13 inches. (Bernal sale; the pair sold for £590.)

Learned, accomplished, having a thoroughly correct and critical taste, he was eminently fitted for the position which he occupied until his death, in 1847. Although the soft-paste work of the last century has been the favorite with collectors, the Sèvres factory never attained to such success in any former period as under the direction of Brongniart, nor are its products of this time surpassed in any portion of its history. In some respects the works of the nineteenth century in hard paste far outdo all their predecessors. Great vases, of sizes unknown before, were made under the direction of Brongniart. Plaques, four feet by three, of white porcelain, were painted by eminent artists with copies of Raphael, Vandyke, Titian, and the works of

other great masters in the galleries of France and Italy. Table services of unequalled lustre, dishes with lapis-lazuli borders, ornamented with landscapes, portraits, and deceptive copies of cameos, attested the success of the new director. The colors on the soft paste sank gently into the paste, and produced more harmonious and delicate effects, but the colors resting on the glaze in the hard paste gave more brilliancy and *éclat*, while the gilding had more of the effect of solid metal. The art student finds it difficult to decide which of the two classes of ware are the more satisfactory to his love of the beautiful, the vieux Sèvres, or the hard paste of the Brongniart period. The superb plaques and other works of Le Guay, Langlacé, Georget, Constantin, Béranger, Robert, and numerous other artists of the later period rank as high as any of the productions of the former century.

Brongniart was the first director who brought to his work a thorough scientific and practical knowledge of all departments of the art. His published works on the subject are of great value, and the splendor of the products of the factory under his care abundantly exhibit his ability.

The personal attention which he gave to the details of the work is attested by occasional specimens on which his approval is endorsed—"Vu Alex. B." This visa was not designed as a mark, but appears to have been the stroke of a crayon made by the director with great rapidity on the backs of such pieces as, for special reasons, were submitted to his examination after the painting and before the firing. After his death the directors have been Ebelman, succeeded by Regnault, following whom came Robert, the present director. Among the most noteworthy advances in the art made from time to time was the adoption, under the administration of Regnault, in 1861, of the principle of compressing the paste in moulds of large objects by means of air pressure. Previous to this, great difficulty had been found in preventing the collapse of large vases, moulded in the wet paste, and not yet thoroughly dried or baked. By the new process, the mould holding the wet paste is subjected to an air-pump, which, as may be desired, presses the air into the interior of the mould and paste, or exhausts the air from a receiver adjusted to be airtight around its exterior; and in either case the uniform and powerful pressure of the atmosphere compresses the paste and produces a strong object, from which the mould may be at once removed without danger to the form. This is not only one of the great triumphs of the Sèvres factory, but one of the most ingenious of modern applications of scientific knowledge to the useful arts.

The history of the Sèvres factory is a brilliant art history. The styles of its products are illustrations of the changing tastes of the upper classes in France; for Sèvres porcelain was always so expensive that its use was confined to the wealthier of the population. The prevailing styles are known as the Pompadour, or Rocaille, from 1753 to 1763; style Louis XV., from 1763 to 1786; style Louis XVI., from 1786 to 1793. Every class of article known to ceramic art was made. Furniture was made of wood in the factory, and ornamented with plaques of porcelain, the wood being little visible between the gorgeous enamels, over which were porcelain statues, exquisitely modelled. Entire tables of porcelain, clocks, armoires, vast jardinières, vases on the pedestals of which stand groups of animals, candelabra in great variety, mirror and other frames, all of the most elaborate workmanship, and innumerable other forms of useful and decorative furniture, were among the factory prod-



168. Sèvres Cup and Saucer.
(Genet Coll.)

ucts. In 1780, Mademoiselle Beaupré, an actress, appeared in a carriage whose panels were porcelain, "ornée de peintures délicieuses, les encadrements en cuivre surdoré." In 1782, the king gave to the Comtesse du Nord a toilet-table and mirror in porcelain, which cost seventy-five thousand livres. The patronage of the crown and of Madame de Pompadour, Madame Du Barri, and others connected with the court enabled the factory to execute many of its most expensive works.

While the factory was still at Vincennes, it produced porcelain flowers, painted to imitate nature. It is said that these were made by the wives of workmen. They became popular, and formed an important part of the work. Brongniart states that two groups, made in 1748 for the king and dauphiness, cost three thousand livres. The Marquise de Pompadour once received the king in winter at the Château of Belle Vue in a room opening from which was what appeared to be a conservatory filled with exquisite flowers in bloom, and emitting their various odors. All were porcelain of Vincennes. The story relates that the king was surprised, deceived, and delighted at the spectacle; but it is probable that the surprise was feigned, since another story, also exaggerated, but founded on fact, says that the king once ordered porcelain flowers, chiefly for the marquise and Belle Vue, to the amount of eight hundred thousand livres.



169. Sèvres Vase: gros bleu. Height 15½ inches. Paintings by Gremont. (Bernal sale; the pair sold for £900.)

Perhaps the most celebrated service made at Sèvres was that executed in 1778 for the Empress Catharine II. of Russia, consisting of 744 pieces, and costing 328,188 livres, equivalent, in our time, to nearly \$200,000. It was subsequently scattered, a hundred and sixty pieces being stolen at the time of a fire in the palace. These were sold in England. Most of them were repurchased by the Emperor Nicholas and restored to Russia, about 1852. A few pieces, however, are still in private collections. A plate of the service was sold at Baron Thibou's sale in February, 1875, for twenty-four hundred francs. This plate was probably like one in the possession of Robert Napier, Esq., dated 1777, which is described as of turquoise ground, having in the centre the letter E, formed of small flowers, and II interlaced, over which is the



imperial crown between branches of palm and laurel. On the border, in medallions, are portraits, exquisite antique engraved gems on jasper ground, and two narrow borders of white, with flowers and gilding. The marks of all the artists are on the back of the plate—Dodin for cameos and busts, Niquet for the initials in flowers, Boulanger for the bouquets, and Prevost for the gilding.

Madame Du Barri relates in a letter that she had made a present of two blue cats, in Sèvres porcelain, to Madame de Mirepoix. These two cats are described by Marryat as of old turquoise céladon, with head draperies of ormolu, bearing ormolu candelabra for four lights on their backs. The ears were pierced, and diamonds to the value of 150,000 francs suspended in them. They were sold at Christie's, in London, in 1863, for £367 10s., without the diamonds, of course. Other animals, snuffboxes, and various small articles were also made.

Jewelled porcelain, so called from the ornamentation in colored pastes resembling precious stones, pearls, etc., was first produced according to some authorities in 1777, others say in 1780. This date should be borne in mind by collectors, as a large quantity of counterfeit Sèvres porcelain is of this description, and it frequently occurs that the date of the counterfeit is earlier than 1777, in which case the piece is false. Any jewelled porcelain which is dated with a single letter from A to Y is not Sèvres. The year 1777 is dated Z.

Statuettes, groups, animals, medallions in white and in blue or black relief on white, busts and other objects, were produced in porcelain bisque in great numbers. Over five hundred models were preserved in the museum. Many by Falconnet, Boizot, La Rue, Pajou, and other modellers are celebrated. These were frequently made to accompany dinner services, and were superb ornaments of the table.



171. Sèvres Plate. (Hoe Coll.)

No collection exists which can be said to illustrate fully, or even fairly, the splendid variety of the work of this factory. It was a happy idea of Brongniart, in 1805, to found a ceramic museum at Sèvres. Louis XVI. presented his collection of Greek vases, formed by Denon, and the Government gathered specimens of the clays and fabrics of France. Foreign governments and individuals contributed by gift or in exchange. In 1826,

Brongniart brought to his aid in the museum Riocreux, who had been a flower-painter in the factory from 1808, and whom an accident had disabled from pursuing his work. He was made conservateur of the museum, and so continued till his death, in 1847. The principle on which the museum was founded and conducted may well afford an example to be imitated by other museums which are in danger of gathering merely curious or beautiful art, without effecting illustration of practical art. "We prefer," said Brongniart, "a Greek, Roman, or Mexican vase with defects which exhibit the principles of their fabrication, to a Greek, Roman, or Mexican vase which might represent the most instructive subject in the history of those peoples." Brongniart gathered in the museum the models of all the pieces useful or ornamental—vases, figures, and groups—that the factory had executed from its foundation. He thus effected one of his special designs, the history of what, in the "Visitor's Guide," is called "le goût dans les arts; c'est à dire, les variations qui parfois s'opèrent rapidement dans la façon de voir, non seulement du public, mais des artistes."

The "Salles des Modelles" contained the collection of forms, but it was sadly broken up by the Prussians in the war of 1870. Among the vases were styles known as the vase écritoire, vase du milieu du roi, vase du milieu Falconet, vase chaine, vase console, vase à bandes, vase vaisseau à mât, vase fontaine Dubarri, vase Duplessis à têtes d'éléphants, vase Triton, vase bas-reliefs Clodion, vase à l'Amour Falconnet, vase à cartels Bachelier, vase œuf garni.

The celebrated colors characteristic of Sèvres were the bleu de roi, a deep dark blue, sometimes veined or sprinkled with gold, to resemble lapis lazuli; the bleu turquoise, discovered in 1752 by Hellet; the rose Pompadour, sometimes called rose Du Barri, discovered in 1757 by Xzrowet; the violet pensée; the vert pomme, or vert jaune; the vert pré, or vert anglais; and the jaune clair or jonquille. In the use of these as ground-colors, presenting an even tint of equal richness and beauty on a surface, this factory had no rival.

Without seeing the specimens, it is not easy to form an idea of the cost of Sèvres porcelain in the earlier times, for the value of such articles always depended on the amount of work expended on each, as well as on the "breakage," which often requires the moulding and baking of several pieces before one perfect is finished. Some of the prices, however, are interesting, as illustrations of the luxury of the work and of the times. The king gave to the King of Denmark, in 1758, a service of green with figures, flowers, and birds, costing 30,000 livres; in 1786, to the Archduke

Ferdinand of Austria a service of turquoise, with daisies and roses, sculptured centres, and also a blue cabaret, with miniatures, busts of the king and queen, all which cost 26,748 livres; in 1787, to the Spanish ambassador a grand table service, blue ground with flowers, which cost 48,252 livres; and in 1788, to the Sultan of Mysore a table service, vases, cups, and busts, costing 33,126 livres.

An album at the factory contains a large number of colored drawings of plates, made during the last century, with prices, and names of some of the purchasers. A few of these are as follows:

	Livres.
Plate: flowers (Prince Louis de Rohan).....	12
Plate: blue border and centre—flowers and gilt (Princess de Lamballe) ..	18
Plate: rose and foliage (Madame Du Barri)	27
Plate: Chinese figures (Madame Du Barri).....	140
Plate: ground green œil de perdrix—birds and busts.....	72
Plate: birds, the names under—bleu-de-roi borders.....	72

The marks on Sèvres porcelain are of two kinds—the factory marks, and the marks used as signatures by artists who decorated the pieces. Both are given in the Table in detail, so far as known, and we believe our list to be the most complete hitherto published. The factory marks varied from time to time. It is important for the inexperienced collector to note that though the form of the interlaced double *S* is always substantially as indicated in the Table of Marks herewith, it was not always precisely the same, being pencilled on the ware with a brush, not stamped with a uniform type. The marks are usually in blue, except as otherwise indicated. A cut in the glaze across the mark indicates that the piece was sold from the factory in pure white, and decoration on pieces thus marked is not original in the factory.

A system of dates by letters was adopted in 1753. It rarely occurred that the date letter was omitted, and therefore articles bearing the simple double L mark should be of Vincennes fabric, as the factory was there until 1756. But immense quantities of counterfeit porcelain bear this mark, without date. Services in velvet-lined boxes, plates in bleu de roi, and turquoise, with jewels and paintings, cups and saucers quite prettily made and ornamented, abound in bric-à-brac shops, and the supply is kept up constantly from French makers. None of these would deceive a collector who had familiarized his eye to the genuine works of the factory, and happily now art museums on both sides of the Atlantic are beginning to furnish opportunity for study by examples. Counterfeits are abundant, and the collector needs experience before trusting his judgment

in purchasing. We have already noticed the frequent occurrence of jewelled ware bearing dates earlier than 1777, and therefore counterfeit. It sometimes occurs that hard-paste wares bear a Sèvres mark and date prior to 1769, when hard paste was first made. Such specimens are, of course, counterfeit. Soft-paste specimens bearing date from 1804 to 1846 are for the same reason counterfeits.

The most deceptive counterfeits are outside decorations on genuine old Sèvres porcelain. In 1813, Brongniart, having previously directed the factory wholly to the production of hard paste, sold the entire stock on hand of old soft-paste wares, including a large amount of unfinished pieces. Three dealers, named Pérès, Ireland, and Jarman, bought the lot, and proceeded to decorate it in old styles. They employed Sèvres artists, and the results were so fine as to defy, in many cases, the most experienced collectors. In 1814, Louis XVIII. received a present of a déjeuner service, with medallion portraits of Louis XIV. and persons of his court, which for two years remained at the Tuileries before it was suspected to be one of the new counterfeits. An examination at the manufactory showed that the plateau was of a late form, and the decoration certainly not old. It was then placed in the Sèvres Museum as an example.

CLIGNANCOURT.—This factory was established in 1775, by Pierre Deruelle, under the patronage of the Count de Provence, brother of the king. The soft-paste wares were known as *Porcelaine de Monsieur*.

BOURG-LA-REINE.—Jacques and Jullien removed their material hither from Menecy in 1773, and continued the manufacture of soft paste.

ORLEANS.—The faience factory at Orleans, under the direction and proprietorship of Gerault-Daraubert, made soft-paste porcelain in 1753. The ware resembles that of other early French factories, as Menecy, Sceaux, etc. Various kinds of wares were made—flowers, figures, and biscuit.

SOEAUX PENTHIÈVRE.—Jacques Chapelle, having founded here a factory of faience, began to make soft-paste porcelain in 1750, and the product was continued till towards the close of the century. Birds, groups of Cupids in clouds, bouquets, etc., characterize the wares, which are often of the highest quality.

ARRAS.—A factory of soft-paste porcelain, established 1784, suspended after four or five years. The work sometimes equalled Sèvres, and is highly esteemed. This ware is frequently disfigured by small particles of coal which was used in place of wood for the baking, and which sometimes adhered to the surface. The same thing occurred in other factories occasionally.

BOULOGNE.—A modern factory of superior porcelain, established by Haffringe.

ÉTIOLLES.—Factory established by Monnier, 1768, for soft paste ; afterward made hard paste. Early work in imitation of St. Cloud.

BRANCAS-LAURAGAIS.—The Count de Lauragais made hard-paste porcelain in 1765 which was decorated in blue. He went to England, offered to sell the secret, and, in 1766 obtained an English patent, stating that he had found the materials in England, and produced the porcelain there. If true, this was the first hard-paste porcelain made in England as a speciality ; Bow having previously made exceptional pieces. No specimens are identified.

VINCENNES.—Pierre Antoine Hannong was manager of a porcelain factory here, founded about 1786, and belonging to a M. Le Maire. It was under the protection of Louis Philippe, Duc de Chartres.

NIDERVILLER.—We have described the faience of this place. Under the Baron de Beyerlé and Count Custine, hard-paste porcelain was made, of good quality. Lanfray, who was Custine's director, brought it to great perfection. After Custine's unfortunate end, Lanfray continued the works as proprietor. In 1827, Dryander, of Sarrebruck, bought them, and after a few years ceased to make porcelain. The stamped mark NIDERVILLE occurs on some fine statuettes and groups relating to America, such as B. Franklin, and Franklin with Louis XVI. in a group. Lemire and Cyfflé are named as modellers of many of the beautiful groups of Niderviller. Joseph Deutsch was a painter. The curious decoration of white cards with black pictures on a ground resembling wood, which was used on pottery, was also used on porcelain.

BOISSETTE.—Hard paste, established 1777.

VAUX.—A monogram, seemingly of VAVX, attributed to this place (about 1770), is also attributed to Bordeaux.

LA SEINE.—Established 1774.

CAEN (1800-'10).—Hard paste, resembling Sèvres paste, well decorated.

VALOGNES (1800-'10).—Hard paste of the best quality, employing some of the artists at Sèvres.

BAYEUX.—Established 1810, and still continuing. Hard paste.

BORDEAUX.—Uncertain period. Jacquemart names a potter, Verneuilles, to whom marks are assigned.

TOURS.—Established 1782.

VALENCIENNES.—Hard paste. Established 1785 ; made biscuit groups and figures, and other wares.

ST. AMAND LES EAUX.—Soft paste. Established 1815 by De Bettignies. This factory has constantly made the best-known copies of old Sèvres pâte tendre, even the fine vases of the old time.

CHATILLON (SEINE).—Hard paste was made here in 1775.

NANTES.—Hard paste. Established 1779; closed about 1790. Another factory, of soft paste, was established in 1809.

CHOISY-LE-ROY.—Hard paste. Established 1786.

LIMOGES.—Soft paste. Established about 1774, by M. Massie. The mark was C. D. It was discontinued 1788. Other works were established and soon suspended. About 1774, a factory of hard paste was founded, which has continued till the present day. The director, appointed in 1788, was M. Alluau, a learned and skilful ceramist. Several other factories of hard-paste porcelain have been established at Limoges in modern times.

MARSEILLES.—Savy, the widow Perrin, and Robert, faience-makers, are all supposed to have made porcelain. None is known of the first two. Fine specimens, in soft and in hard paste, decorated with views of Marseilles, and other well-executed paintings, are attributed to Robert.

PARIS.—Many porcelain factories were established in Paris; and, although generally unimportant, there are occasional pieces made in the different shops, which were decorated by the best artists. Well-known names of Sèvres decorators are found on vases and other pieces of the Paris makers. We have already mentioned the establishment of the widow of Chicanneau of St. Cloud, founded about 1722, for soft paste, and continued till about 1762.

The MANUFACTURE DU DUC D'ORLEANS, for hard and soft paste, was established 1784, and in 1786 was authorized by Louis Philippe Joseph, Duke of Orleans, to sign L. P., and take the name by which it was known.

Henry F. Chanou established a hard-paste factory in 1784.

Jean Joseph Lazzia established a hard-paste factory in 1774.

The DE LA COURVILLE factory of hard paste, established in Paris in 1773 by Jean Baptist Locré, was important, and produced the finest class of work, decorated by the best artists. It was called also *La Manufacture de Porcelaine d'Allemande*, and the mark of two torches crossed is often mistaken for that of Dresden, the porcelain being similar. This mark resembles too that of Dubois, also in Paris. A large class of vases common in America, covered with gilding, more or less ornamental, with handles moulded in serpent, scroll, and other forms, having on one or both sides paintings, usually poorly executed, but sometimes fine, are of this

factory. Marks are not common on them. We have seen specimens, painted and signed by celebrated Sèvres artists, which are valuable.

Jacob Pettit established at BELLEVILLE in Paris, in 1790, a hard-paste factory, making fine work in vases, candelabra, figures, and a variety of beautiful wares. He made porcelain flowers, mounted on metal branches and leaves, and used as relief-work on vases, etc. Later these works, removed to Fontainebleau, have imitated Dresden with the mark.

A factory of hard paste, founded by Le Maire in 1780, was purchased in 1783 by M. Nast, who produced choice work, much of which was exquisitely decorated. The factory is still in existence.

Honoré established a hard-paste factory about 1785. In 1812, Edward and Theodore Honoré formed a partnership with P. L. Dagoty, and the works were called *Manufacture de Madame la Duchesse d'Angoulême*. Dagoty retired in 1820, and established another factory. The same P. L. Dagoty had, at the end of the last century, a factory of hard paste, which was later styled, and marked, *Manufacture de S. M. l'Impératrice*.

Pierre Antoine Hannong had a hard-paste factory, in 1773, in a faubourg of Paris, where he made wares signed H.

Vincent Dubois established in 1773 a hard-paste factory, using for his mark two crossed branches with leaves, in allusion to his name. They are sometimes called pointless arrows.

The *Porcelaine d'Angoulême*, hard paste, was made from 1780, by Dohl & Guerhard. The finer works of this factory are prized.

The works of M. Fenillet in modern times are important because of one of his marks, the interlaced L's of Sèvres, enclosing the letter F, often mistaken for the Sèvres mark, which it resembles. He has produced much superbly decorated work. His plates have ordinarily the three support marks.

ISLE ST. DENIS.—Hard paste, established 1778 by Laferté. Bisque busts are known, signed *Gross*.

STRASBOURG.—About 1752, Paul Hannong, then working the faience pottery at Strasbourg, learned the secret of hard-paste porcelain, and began its fabrication. The interference of the royal factory at Sèvres suspended his work, and he went to Frankenthal in 1753.

VIII.—GERMANY, AUSTRIA, AND HUNGARY.

The introduction into Europe of the manufacture of hard - paste or true porcelain was one of the most important events in history. Pottery was fragile, and its decoration was expensive if beautiful. Porcelain was as beautiful as gems in its white condition, far more durable than pottery, and, when it could be made cheaply, took the place of wood and pewter in domestic use. Thus it became the vehicle for the introduction of art, with its refining influences, into the most humble houses, and into very many wealthy homes also where formerly gold and silver had been abundant, but art had found no entrance. The civilizing and elevating influences exerted by the discovery in Europe of the art of making true porcelain can hardly be over-estimated. To form some idea of this, it is only necessary to reflect on the vacuum that would be produced in domestic circles, among the rich as well as the poor, if all porcelain were abolished, and all modern stone-ware, which has been produced as the rival, and therefore as one of the effects, of porcelain.

China and Japan had made porcelain from a remote period, but up to the year 1700 the quantity imported into Europe had been comparatively small. Only the wealthy possessed it, and few even of that class. Little was known except the blue-and-white. Wood and pewter furnished the tables of a large portion of the population, giving place here and there to coarse pottery, which in the houses of the wealthy was enriched with more or less artistic decoration.

In 1701, the Elector of Saxony, Augustus II., King of Poland, had



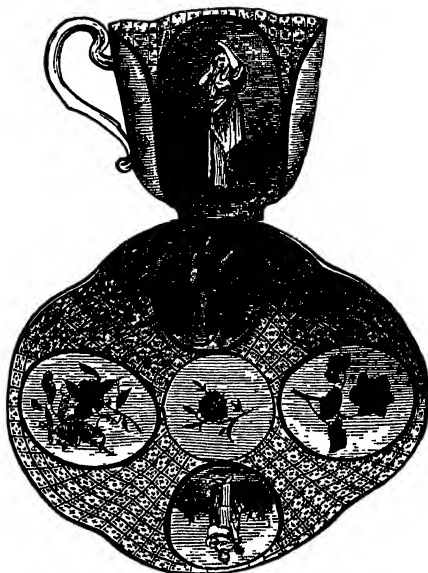
172. Böttcher Ware
Teapot, lacquered
and gilt. (T.-P. Coll.)

in his employ Tschirnhaus, an experienced chemist, and John Frederic Böttcher, a young chemist, who together sought the "philosopher's stone." Böttcher was a man fond of gayety, uniting remarkably the characteristics of a hard worker and a free drinker. Their laboratory was in the old castle at Meissen, on the Elbe, about twelve miles from Dresden. Tschirnhaus furnished Böttcher with a clay found near Meissen, to be used in making crucibles. Böttcher ascertained that this clay would make a hard pottery, varying from deep brick-red to a dark ashy brown in color, exceedingly strong, as well as fine in grain. It was not porcelain, but a stone-ware. The king recognized the value of the discovery; and possibly because of

Böttcher's giving to this ware the name *red porcelain* encouraged the chemist to seek the art of making true porcelain.

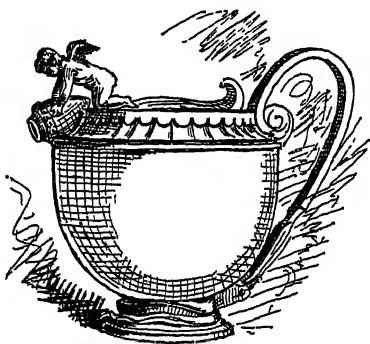
Bottcher ware, as this red stone-ware is commonly called, was produced in considerable quantity and variety of form. It was at first without glaze, and was decorated by polishing and engraving the surface on a lapidary's wheel, or by varnishing with lacquer, on which designs in gilt were painted. Somewhat later, a ware, which has been classed as Bottcher ware, was produced, of rich dark chocolate-color, well glazed, and decorated with designs in gold and in silver, chiefly Oriental in character.

Böttcher's further experiments seem to have been continued without very much method, and consisted in making pastes of various compositions, which, being subjected to the furnace heat, failed to produce porcelain. He stumbled on the secret by an accident. The story is that his valet purchased a new hair-powder in Dresden, and the chemist, observing that his wig was heavier than usual, tried some of the hair-powder in one of his mixtures. The result was true porcelain. Inquiry led to the discovery that the hair-powder was that clay which alone of all clays will produce hard-paste porcelain, and which is known by its Chinese name, kaolin. An iron-master, one Schnorr, had, while riding on horseback at Aue, near Schneeberg, noticed this clay adhering to the hoofs of his horse. Schneeberg was in the mining district of the Erzgebirge, where nature had stored silver, tin, iron, lead, coal, and even cobalt, which furnishes the best blue in ceramic decoration. Doubtless the iron-master was led to think this clay, unlike any other that he had seen, worth an examination in a country so rich in mineral products. He found no better use for it, however, than to sell it in Dresden for hair-powder, and by accident Böttcher discovered that the ore-mountain district furnished also this treasure of kaolin. The Government monopolized the discovery, and sought to keep it a profound secret. The kaolin was placed in sealed casks by dumb men, and conveyed to Meissen, where now the king established a porce-



173. Dresden Cup and Saucer: King's period.
(T.-P. Coll.)

lain factory. Every precaution was taken to preserve the knowledge of the art from becoming public. The workmen were not only sworn to secrecy, but were practically prisoners in the castle at Meissen. On the walls they read everywhere the notice, "Secrecy to the grave." But stone-walls and oaths failed to guard this secret, which was more valuable to the world than would have been the philosopher's stone which the discoverer had set out to find. Nevertheless, the rule of secrecy was observed at Meissen for a hundred years,



174. Dresden White Teapot: Marcolini period. (T.-P. Coll.)

and was not repealed till in 1812, when Napoleon sent Brongniart, the savant and director at Sèvres, to Meissen, to inspect the Saxon processes. Even the king, when he visited the works, went through the formality of the oath as an example. Within a few years after Böttcher's discovery, the art was known throughout Europe, and various factories were established. There is some confusion about dates in connection with Bottcher's discovery. Tschirnhaus died in 1708, and

it was probably about 1710 that Bottcher's heavy wig led to the knowledge of kaolin. The first public sale of Dresden or Meissen porcelain was at the Leipsic fair in 1715. In 1718, a Meissen workman was bribed to violate his oath, and carried the art to Vienna, whence it went, in 1720, to Höchst, and then spread widely from year to year.

The rapidity with which the art sprang to perfection is not surprising, since kaolin was the only substance wanting to the product of pure white translucent hard paste. With the art of decorating pottery Europe had long been thoroughly familiar, and the decoration of porcelain required few new instructions.

The first color used at Meissen was the blue from cobalt, perhaps obtained from the same ore mountains near which the kaolin was found, and pieces were decorated in the style of Oriental blue-and-white. But the porcelain decorators soon used all the colors known to the faience decorators, and rapidly added to these. From about 1720 artists of great ability were employed in the factory.

The history of the Dresden, Meissen, or Saxon porcelain factory (the three names apply to the one factory) is usually divided into three periods, designated as: 1. The King's period, ending 1756 or 1796; 2. The Marcolini period, ending 1814; 3. The Modern period. The King's pe-

riod, in strict words, should be confined to the brief space 1731-'33, when the king in person superintended the works, but it is commonly extended from 1731 to the breaking-up of the factory by the war in 1756, and by some to Marcolini's time.

Collectors of Dresden or other pottery or porcelain should not be misled by fashions which often control and prevent the free exercise of taste. It is the fashion to regard the work of the King's period as the finest in every way, and it therefore generally commands the highest prices. But there was much poor work done in that period, and much work of high art executed in the Marcolini period which fully equalled any that had preceded it. The early portion of the Modern period also produced porcelain of the highest class and artistic value. The judicious collector will be guided by an educated taste in selecting specimens from the various periods.

Böttcher continued in charge of the factory till his death in 1719, at the early age of thirty-five years. In 1720, Horoldt became director. In 1731, the king himself took the direction, until his death, in 1733, when Count Bruhl was appointed director, and so continued till the breaking-up of the factory in the Seven Years' War. Frederick the Great robbed the Saxon establishment to enrich Berlin, but the factory resumed work under the direction of a commission; and after the peace, Dietrich, the celebrated engraver, was first director. In 1796, Count Marcolini became director (Marryat says 1774), and so continued till 1814. It has been supposed by some that up to the death of Böttcher, in 1719, the factory produced only white ware, without colors. Under Horoldt rapid advance was made both in forms and decoration.



175 Dresden Teapot. (T.-P. Coll.)



176. Dresden Chocolate-pot. Marcolini period. (T.-P. Coll.)

Figures of men, beasts, and birds, of life size as well as small,

were produced. Kändler, a sculptor, was superintendent of modelling after 1731.

Many groups of this period are celebrated. Count Bruhl's tailor and the tailor's wife riding on goats are well known, from frequent modern reproductions. "The Carnival of Venice" consisted of more than a hundred pieces, mostly figurines, which could be arranged in one group, or placed separately. The Japanese Museum at Dresden contains a number of figures of wild animals of life size, and a large variety of specimens of

the early modelling. In the first years the white porcelain, not decorated, was never sold, being reserved for the private use of the king, or for presents made by him. Specimens have therefore always been rare. Baron Busch, Canon of Hildesheim, had an art of engraving or etching on the surface of white porcelain, and good specimens of

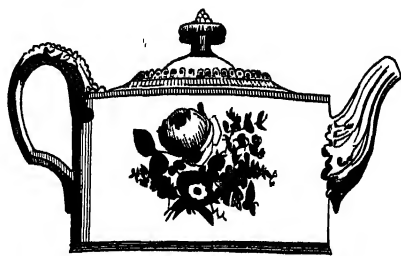


177. Dresden Tray Marcolini period. (T.-P. Coll.)

work are esteemed most highly. A service thus decorated, lately belonging to the Duke of Brunswick, was estimated at ten thousand pounds. Angelica Kauffman painted on Dresden porcelain, and her oil-paintings, as well as those of other eminent artists, were often copied by the artists of the factory. Lindener (1725-'45) is the most celebrated Dresden artist. He painted birds and insects.

In the Seven Years' War, Frederick the Great took Dresden, and seized on the royal factory, which was the property of the crown. He carried to Berlin workmen, moulds, and even materials, and from this plunder the Berlin factory dates the origin of its success.

The question which is often asked by persons not familiar with ceramic collections, "Is the work of Dresden or of Sèvres the superior?" can hardly be answered. The Dresden hard-paste porcelain was always superior to Sèvres as porcelain. In flower decoration, in birds, insects, and animals in general, in figures and figurines, Dresden work was generally superior. In



178. Dresden Teapot, to accompany Tray, No. 177. (T.-P. Coll.)

ground-colors, especially in rose and in blues, Sèvres vastly excelled Dresden. In general art, landscape, portrait, and figure painting, each lover of art must answer the question for himself. Neither factory has precedence in reference to forms of vases and other articles, for both employed eminent modellers, copied every known form of beauty, and produced many miserable original forms. It is worthy of note, however, that in figurines both Sèvres and Dresden, and all other factories, were surpassed by Höchst. The desire to possess old Sèvres has, however, been so great that its prices vastly exceed those of Dresden.

The factory marks used on Dresden ware at various periods are given in the Table. They are usually in blue, under the glaze. The forms of these marks vary, because they were made rapidly with a dashing stroke by the decorator or workman. The examples given are typical, and slight departures from these forms are unimportant.

The earliest marks known are the monogram of A. R., and the mark of the caduceus of Mercury, as it has been called, or the wand of Æsculapius, as others think it. The latter mark was used only on pieces made for sale. The crowned A. R. is occasionally found in gold.

In 1721, the crossed swords, taken from the arms of the Elector of Saxony, were adopted, usually with a dot or a circle between the handles, and continued in this form until the Marcolini period, during which a star took the place of the dot. The modern mark is the crossed swords with-

out dot or star, occasionally accompanied by letters or numbers, or both. The letters M. P. M., for Meissener Porzellan-Manufactur, and K. P. M., for Königlich Porzellan-Manufactur, are found on some early specimens, but these and some other marks are rare and exceptional.

Of late years this royal Saxon factory has descended to the production of porcelains bearing its own ancient marks, a practice which not only brings just condemnation on the present management, but inevitably tends to the injury of its old reputation; for the modern works are inferior to those of many of the Continental factories.



179. Dresden Chocolate-pot, to accompany Tray, No. 177. (T.-P. Coll.)

All porcelain sold in white undecorated condition has the factory mark cut across by one cut in the glaze. No decorated piece having the mark thus cut was decorated in the factory. But many able artists have used the white porcelain thus cut for decoration, and it does not follow that a specimen is to be rejected on account of the scratch across the factory-mark. It is only to be remembered that a piece thus scratched is not a specimen of the Dresden factory decoration. A decorated specimen with one or two scratches above or below the mark (not crossing it) is thus scratched because of some defect. Vessels for table use which have defects are cut with two, three, or four scratches crossing the mark, the defects being greater, the greater the number of marks.

We not unfrequently find table services consisting of some pieces decorated in the factory and some decorated outside on factory porcelain; and it sometimes occurs that the outside decoration is the better. These instances probably happen from the filling-up of partially broken services.

The factory has, of late years, produced wares in extensive quantity, counterfeiting its own ancient marks.

Quite recently a large quantity of porcelain has been sold in America, bearing the Dresden mark, which is made in other factories. Figurines of a coarse paste, poorly glazed, and vases in a variety of forms, are quite common. The collector who has once learned the appearance of old Dresden ware will not be deceived by these articles, which are generally

clumsy in modelling and weak in color. The same counterfeiters place the old Berlin and other marks on their wares.

It remains only to add that the products of the Dresden factory have been almost infinite in form and purpose. Services for the table, ornamental vases, figures of men and animals, candelabra, frames, portions of furniture, household utensils of various kinds, plaques—in short, an



180. Dresden Saucer. King's period. (T-P. Coll.)



181. Dresden Milk-pot: King's period. Diamond engraving. (T-P. Coll.)

innumerable variety of objects, were the product of this first of the European factories of true porcelain.



182. Dresden Vase:
King's period. (T.-P.
Coll.)

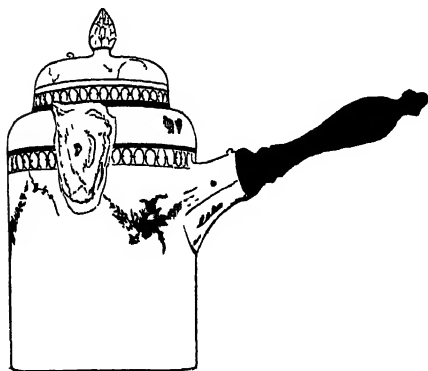
VIENNA.—The Vienna factory of hard-paste porcelain was the first child of Dresden. Claude Innocent Du Pasquier, having received a patent (bearing date May 27th, A.D. 1718), for twenty-five years, from the Emperor Charles VI. for the exclusive sale of porcelain in the Austrian Empire, went to Dresden, bargained with a Meissen workman named Stenzel for a yearly payment of a thousand thalers and a carriage, and induced him to break his oath, and go to Vienna, where Pasquier established the factory. His partners were Heinrich Zerder, Martin Peter, and Christophe Conrad Hunger, an artist. The work was poor. Stenzel would not communicate the secret, and not being regularly paid, abandoned the factory, which was sus-

pended after two years of unsuccessful work. Du Pasquier in some way discovered the secret, and resumed the production of porcelain; but, in 1744, finding his labors unrewarded by the success he had expected, he offered it to the Government. Maria Theresa accepted his offer; the State purchased the factory in 1747; Du Pasquier was appointed director; and a more brilliant era commenced. Groups and figures were now produced, Joseph Niedermeyer being chief modeller. Down to 1790 the factory produced its best work of this description. After 1780 its artists equalled Dresden in painting and decoration, and this high rank was maintained to 1820. In 1785, under the direction of the Baron de Sorgenthal, great strides were made in all departments of work. Good medallions and imitations of Wedgwood's wares were also produced. The paintings of Watteau, Boucher, Angelica Kauffman, and many other celebrated artists have been exquisitely reproduced on Vienna porcelain. Leithner, a chemist,



183. Vienna Plate. Embossed border; fruit and flowers painted. (T.-P. Coll.)

prepared the most celebrated colors, and that gilding which is renowned as a very striking feature of the ware. George Perl succeeded Leithner, and is distinguished as a decorator. Schindler was an artist in ornaments;



184. Vienna Chocolate-pot. (T.-P. Coll)

Foerstler painted mythological subjects; Lamprecht was an animal-painter, who afterward worked at Sèvres; Joseph Nigg painted flowers; Varsanni, Wech, Herr, Perger, Raffey, and Schallez are also known as painters.

A rich-cobalt blue and a red brown, both discoveries of Leithner, were characteristics of Vienna decoration. The factory ceased in 1864. The mark was always the shield of the arms of Austria, varying in

form, and from 1784 to 1864 pieces were marked with the date, by impressing in the paste the last three numerals of the year—thus, 812 for 1812. The signatures of artists also occur on pieces.

The Vienna marks are sometimes counterfeited by modern potters, and collectors must depend on experience in judging of their purchases. We have seen soft-paste plates, richly decorated, bearing the Vienna mark, which were admirable specimens of work, apparently French.

HEREND (Hungary).—No factory has more puzzled collectors by its products than this. Its marvellous imitations of old work, signed with Herend marks, led to the belief that an old factory of porcelain had existed there. Many splendid specimens have been brought to America, copies of Oriental wares and of decorations of Sèvres and Dresden, as well as original works of the artists of the factory. A factory of pipes was the only pottery at Herend until 1830, when Moriz Fischer established his hard-paste porcelain works, whose original products equal those of any European establishment, and whose reproductions of Oriental wares are of such sort as to deceive the most experienced. The factory mark is usually placed on its wares. No intent to deceive is shown. The maker seems to take pride in exhibiting the marvellous skill with which he can duplicate the beautiful styles of the celebrated old factories of Europe and the rarest wares of Asia.

So deceptive are some of these last that a cabaret of white porcelain, having compartments in green, with flowers, etc., was purchased by the South Kensington Museum in 1863 as Oriental, and its Hungarian ori-

gin was not discovered for a long time. The history of a very beautiful bowl in our collection, classed as unknown Asiatic ware, was precisely similar. The ground is a pale green, decorated with white marguerites and other flowers in rich colors on stems springing from the base. The exquisite enamels extend over the bottom, leaving a small white circle in the centre. A few touches of blue, supposed for years to be accidental, were at length, with the aid of a glass, resolved into the Herend mark of the Austrian arms.

The marks used at this factory are various. Those given in the Table of Marks are taken from specimens in our own collection. HEREND, impressed in the paste, is a frequent mark. The Austrian shield is used in various sizes, sometimes very small. The mark with the crossed swords of Dresden, and the letter W accompanying the impressed name, is on a service decorated in rich Oriental style. Odd marks in red, somewhat like Chinese signs, are on specimens with Oriental decorations. The proprietor of this factory has earned for it a brilliant reputation, due to the close attention paid to its productions. He employs artists from Dresden for his imitations of Saxon porcelains, from Sèvres for copies of the old French, and, finding no Europeans competent in certain parts of the imitation work, has introduced Chinese skilled labor on his Oriental wares. This is the only instance within our knowledge of the employment of the Orientals in European porcelain factories.

A factory at PRAGUE, in Bohemia, uses for its mark K & G, PRAG, impressed.

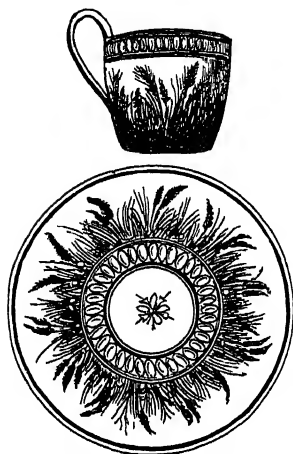
A factory exists at PIRKENHAMER, near Carlsbad, founded in 1802, and purchased in 1818 by Christian Fischer, whose partner was Reichembach. The marks are C. F. and F & R. This factory has taken high rank in modern times.

SCHLAKENWALD.—A hard-paste porcelain factory was established at Schlackenwald, in Austria, about 1800, and produced good work in services and other forms. The mark was a large S, and sometimes a script S, painted. On a pair of fruit dishes, painted with a bouquet of flowers and richly gilded, in our collection, the latter mark is in gold. The factory was in operation at a recent date.

A hard-paste porcelain factory was established at ELBOGEN, in Bohemia, in 1815, and still exists. Its work is celebrated, especially that made under M. Haidinger. The mark is an arm, with elbow bent, holding a sword.

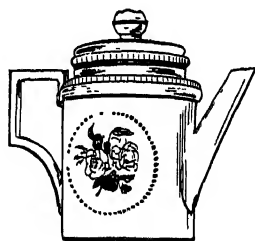
ALTEN-ROTHAU.—A hard-paste porcelain factory exists at this place, the proprietor A. Nowotny. The mark is impressed—either the name NOWOTNY or the initials, A. N.

BERLIN.—The Berlin (hard-paste) factory was established in 1751 by William Wegeley, whose mark—a W (of which the middle lines cross), is found on early specimens. In 1761, Gottskowski, a banker, bought the establishment, and improved the products. Grunenger was employed as director, and so continued after the purchase of the factory by the king in 1763. At this time the products of every kind were of the best sort. Not only the ordinary services and vases were made, but also groups, figures, snuffboxes, ear-rings, lamps, candelabra, furniture ornaments, and a large variety of other objects.



185. Berlin Cup and Saucer. (T.-P. Coll.)

On the occupation of Dresden, by Frederick the Great, in the Seven Years' War, he transported from the Meissen factory not only materials, but workmen, clay, and specimens from the Dresden collection, to enrich his works at Berlin. A curious decree made by Frederick for the encouragement of his factory, and the diffusion of its work, forbade any Jew in his dominions to marry until he produced a voucher from the director of the factory that he had bought a specific amount of porcelain. In 1776, seven hundred men were employed in the works. From that time to this the Berlin royal factory has kept pace with the advancing and changing demands of the successive periods, and within the past few years has achieved greater triumphs than perhaps any other Continental factory. Its products have been in every form known to ceramic art, and its artists skilful in all departments of decoration. While, in general, its flower-painting was not equal to that of Dresden, it was in some instances superior. Berlin figures and groups of the last century were, as a rule, superior in modelling and color to those of Dresden. As Berlin reproduced the rare and splendid works of other factories, but with its own mark, counterfeiters have sometimes covered the blue sceptre mark with a gold rose or a green leaf to conceal it, sometimes first removing the mark and glaze with fluoric acid. The sceptre mark is not always in the same form, but the differences are no indication of comparative date.



186. Berlin Teapot. (T.-P. Coll.)

Lithophanie, the making of pictures in plaques of porcelain paste, the

shades produced by the varying thickness of the plaques, was invented in this factory. Transfer printing on porcelain is also claimed here as the discovery of a chemist, Pott, in 1753, in which year he published a book on the subject. It does not appear, however, that any practical use was made of the art.

About 1760 a hard-paste factory was founded at CHARLOTTENBURG, near Berlin, by Pressel, which continued till, in modern times, it was absorbed by the royal factory.

From 1717 to 1729 hard-paste porcelain was made at BRANDENBURG.

A factory of hard-paste porcelain has long existed at ALTWASSER, which produced good table wares, tastefully decorated.

In 1720, Ringler, escaped from the oaths and secrets of Vienna, came to HOCHEST, then in the electorate of the Bishop of Mayence, and assisted Gelz and others in adding a hard-paste factory to the faience works already there existing. Exceedingly beautiful work was produced, especially in figures and groups, of which the most highly prized are those by the modeller Melchior, which are occasionally, but rarely, marked M. His successor, Ries, made figures with large heads, and his period is commonly called the "Thick-head" period. Christian Gottlieb Kuntze was an enamel painter of the factory, celebrated for blue and red. In 1794 the works were sold.



187. Berlin Cup: portrait of Frederick the Great. (T.-P. Coll.)

NUREMBERG. — As early as 1712, soft-paste porcelain was made at Nuremberg by Marz and Romeli, who, as we have seen, were faience-makers. In the Berlin Museum are six oval plaques, painted in blue, with inscriptions giving the name of Christoph Marz as founder of the Nuremberg porcelain fabric in 1712, and that of George Tauber as the painter in 1720, while another inscription in nearly the same words gives the name of Johann Conradt Romeli as founder. Another plaque in England records the name of J. J. Mayer as purchaser of Romeli's half interest in 1720. All these plaques which have portraits of Marz and Romeli among their other decorations seem to have been made as records of the history at the time of Romeli's sale. Marz died in 1731, when the works were sold. A plaque in M. Demmin's collection records his death.

FRANKENTHAL. — A hard-paste factory was established at Frankenthal, in Bavaria, by Paul Hannong, in 1754, which made wares of the highest class till 1800. In 1761, it became the property of the Elector Carl Theodore, and under his patronage equalled in the beauty of its products

any European fabric. The figurines of Frankenthal have justly a great reputation. Fruit and flower paintings were admirably executed. The works when sold, in 1800, were removed to GREINSTADT, and continued in private hands.

In 1747, a factory of hard paste was founded at NYMPHENBURG and NEUDECH by a potter, Niedermayer. Ringler came here in 1756, and in 1758 the works were confined to Nymphenburg. The products are highly prized, and works are of great beauty. Heintzmann and Adler are among the celebrated decorators of the wares in landscape; Lindemann, another. L. C. Fouquet, a Sèvres painter, also worked here, having previously worked at Berlin. The factory is still at work in private hands. The white wares are sometimes sold undecorated, with the impressed mark, and, being decorated at other factories, receive a second mark in color.

The BAIREUTH porcelains are modern.

ANSBACH (in Bavaria since 1806) was the seat of a hard-paste porcelain factory in the early part of this century, at which some very well decorated wares were made.

FÜRSTENBURG.—Bengraf, from Höchst, established a hard-paste factory at FÜRSTENBURG, in Brunswick, in 1750, which was under the patronage of the Duke of Brunswick, and has continued during modern times, making wares of very high quality and decoration. The mark is the letter F in several cursive forms, sometimes accompanied with initials of artists. On a set of three vases in our collection are the letters A. B. On others are R. R., A. C., and on one *Beck*.

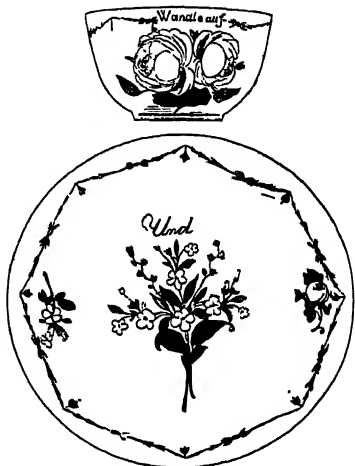
Hard-paste porcelain was made at HOXTER about 1770 by a painter of flowers—Zeiseler—who was succeeded by Paul Becker.

At LUDWIGSBURG, or KRONENBURG, in Wurtemberg, Ringler established a hard-paste factory in 1758, under the patronage of Charles Eugene, the reigning Duke of Wurtemberg. This was one of the most extensive factories in Germany, second only to Dresden and Berlin in the number of its products, and not second to them in the beauty of many works.

At FULDA, in Hesse, in 1763, a hard-paste factory was established by the prince-bishop, which produced fine vases, figures, and services, decorated by able artists. Good specimens are not common, and are highly prized.

The Thuringian factories of hard paste are interesting because of an independent discovery of the art here made. At RUDOLSTADT, near Jena, a young chemist named Macheleidt, then a student of Jena, experimented to find the secret of true porcelain. A woman brought some sand to his father for sale, and with the aid of this he made a ware resembling porce-

lain, and continued his experiments until he perfected the discovery, and received from the Prince of Schwarzburg permission to establish a factory at SITZERODE, which was soon after, in 1762, transferred to VOLKSTADT. Other factories followed. One at WALLENDORF, in Saxe-Cobourg, was founded in 1762; one at LIMBACH, about 1761; and one at RUDOLSTADT, date uncertain. A manufacturer—G. Greiner—obtained, about 1770, the control of several of these factories, and at that date established one at GROSBREITENBACH. He seems to have run those at Volkstadt, Wallendorf, and Grosbreitenbach as one establishment, as we find the several marks on pieces in the same services. Some of the wares were very beautifully decorated. We have a Wallendorf service, the pieces decorated with a rebus: *Wandle auf* over roses on one side; and on the opposite side of the piece, *Und* over forget-me-nots, reading “*Wandle auf Rosen und Vergiss-mein-nicht*” (Ill. 188). The marks R. g. and R—n are attributed respectively to RATISBON and RAUENSTEIN, while a simple R is attributed to Rudolstadt. These marks are uncertain. Hard-paste porcelain was made at Ratisbon (Regensburg) in the last century. The factory at Rauenstein was founded in 1760, and wares there made resembled those of Wallendorf.



188. Wallendorf Cup and Saucer. Rebus decoration. (T.-P. Coll.)

A great deal of Thuringian porcelain is ribbed or fluted. Some of the wares bear the marks of other factories, notably of Dresden. The trefoil mark of Grosbreitenbach is often very carelessly made. On a service in our collection no two pieces have the mark in the same form.

Hard-paste porcelain was made at GERA about 1780. The mark is a G. We have it on a delicate egg-shell cup and saucer, decorated with rich gilding and Chinese figures in colors.

At GOTHA a hard-paste factory was founded, in 1780, by Rothenburg.

From 1753 to 1778, hard-paste porcelain was made at BADEN-BADEN by the widow Sperl.

IX.—SWITZERLAND.

About the middle of the eighteenth century (1759 ?), a hard-paste porcelain factory was founded at ZÜRICH, as it is supposed, by some one of the workmen at Höchst, in Mayence. The work, in general resembling Dresden, was very good, and specimens show the best class of paste and decoration. They are rare, as the factory ceased work long ago. We have a tea-service, decorated with flowers, admirably executed.

In the latter part of the last century, Maubrée, a Sèvres decorator, established at NYON a hard-paste porcelain factory, which produced very beautiful work in French styles. We have specimens, with flower decorations and landscapes well executed. Mr. Chaffers attributes to this factory specimens on which occur the name *Geneva* or the letter *G*, and states that the Genevan artists, Delarive, Hubert, Gide, and Pierre Mulhouser, painted Nyon porcelain, Gide signing with his name, and Mulhouser with a monogram of the letters P A M. The fish, mark of Nyon, is often so roughly drawn as to be with difficulty recognized.

X.—HOLLAND.

Though pottery was made so plentifully in Holland, it does not appear that porcelain was made until 1764. The Delft potters decorated Chinese porcelain, adding arms and devices to the existing decorations, and it is not improbable that white porcelain was sometimes imported and decorated there. We have some specimens, which are otherwise inexplicable. A large bowl, of remarkably pure Oriental porcelain, has for sole decoration two oval pictures in black, the work of a first-class European artist representing a Dutch political subject, with a Dutch inscription on one side. The decoration contains no other color, and is unmistakably European, while the porcelain is certainly Chinese. Nor is this a solitary specimen. It is quite possible that many specimens classed as English ware of Lowestoft are of this class.

In 1764, a hard-paste porcelain factory was established at WEESP, near Amsterdam. Specimens are rare, for the factory ceased after seven years. The paste is fine and thin; the mark, a W (the middle lines crossing), or two bâtons crossed, with three dots. The first mark is also that of Wegely at Berlin, and of Wallendorf in Thuringia, and care must be exercised in assigning specimens.

In 1772, this factory, or a new one, was opened at LOOSDRECHT, by a clergyman named De Moll, and produced excellent work. The mark, M o L, on this porcelain has no reference to the name of the reverend potter, but means *Manufactur oude Loosdrecht*. A star sometimes accompanies it. In 1782, the works were moved to AMSTEL (old Amstel, near Amsterdam), and continued prosperous. Some exquisitely painted ware was produced here. The work ceased before the end of the last century. About 1808, a factory was in existence at NEW AMSTEL, but ceased in 1810.

A mark, a rampant lion (not crowned as in the Frankenthal mark), is assigned to an unknown factory in Amsterdam. We have specimens in white unpainted basket-work.

THE HAGUE had a hard-paste porcelain factory, established about 1775, by a German, which made choice work, well decorated. It was short-lived, and was closed before 1790.

Although LILLE was under the dominion of Holland in 1711, when soft-paste porcelain was first made there, we have described its works among those of France, to which it passed.

XI.—BELGIUM.

In 1750, a manufacture of soft-paste porcelain was established at TOURNAY. Specimens called *porcelaine de la Tour* (from the mark, a tower), in divers shapes, are assigned to it. Others have given these specimens marked with the tower to Vincennes in France. Close imitations of Sèvres have been produced here.

At the end of the last century, L. Cretté seems to have made hard-paste porcelain at BRUSSELS, which he signed with his name. Another mark is a crowned B, but this is not certainly of Brussels.

In 1806, M. Boch made hard-paste porcelain at Luxembourg, marked B. L., the letters separate and in monogram.

XII.—SWEDEN.

The Swedish factory, at MARIEBERG, whose faience has been described, made soft-paste porcelain, which is good and rare. The rustic or twig handles, feet, and ornamentations, as on the pottery, are also on the porcelain. Figures and groups are found, cream-pots, with fluted spirals, decorated with beautiful little bouquets of flowers, and occasionally candelabra.

XIII.—DENMARK.

Three parallel waving lines are the mark on the hard-paste porcelain of COPENHAGEN, some of which is highly artistic. A manufacture began in 1760, and the early products were generally decorated in green, and are rare, for the factory soon ceased to work. It was reopened about 1770-'72 by a stock company; but in 1775 the Government purchased the stock, and has since carried on the factory, paying its annual deficit; for, although it has made porcelain of the highest artistic character, it has never made money. Müller, who started the revival, remained in charge, and it was in his time, in 1801, that Lord Nelson, a lover of porcelain, bought some in Copenhagen, and sent it to Lady Hamilton, as recorded in one of his letters to her. A very beautiful service of Copenhagen is decorated with portraits of celebrated painters. Some specimens have fine flower paintings, and the general ornamentation is admirably executed. From 1802 to 1807 groups and figures were made under Müller's direction.

XIV.—RUSSIA AND POLAND.

The Empress Elizabeth established at ST. PETERSBURG, in 1744, a hard-paste porcelain factory, with workmen from Dresden, and the crown has fostered the works, which rank among the highest in Europe. The wares are hard, the enamel white and pure, the decoration various, rising to the finest art. Vases, figures, table-wares of all kinds, are among the products. They often resemble the works of Dresden, and sometimes those of Kronenburg and other German factories. The mark is usually the initial of the reigning emperor or empress, in the Russian alphabet. Some marks—one, three parallel lines; and another, a waving line somewhat like a letter S—are very doubtful.

A manufactory was established in St. Petersburg, in 1827, by the brothers Korneloff, whose name is on their products.

At SAVSK, towards the close of the last century, porcelain was made by M. Volkof.

The name of a town, *Baranowka*, is found on specimens of hard-paste porcelain.

In Moscow, in 1787, an Englishman named Gardner established a factory, of whose products we know nothing, but the name, in Russian let-

ters, is found on specimens. Modern manufactories at Moscow are conducted by A. Popoff and M. Gulena, whose names are on their wares.

Richly gilded and well-painted hard-paste porcelain has been made since 1803 at KORZEC, in Poland. Merault, a chemist, from Sèvres, went there with Sèvres artists, to take charge of the factory, about that date.

PART IV.

POTTERY AND PORCELAIN OF ENGLAND.

THE history of pottery and porcelain in England is worth the study of the political economist and the statesman, as well as the lover of art. It is little more than a century since the products of England were, in general, of the cheapest and most common kinds. To-day, they not only rival, but surpass, the products of the Continental factories in every de-

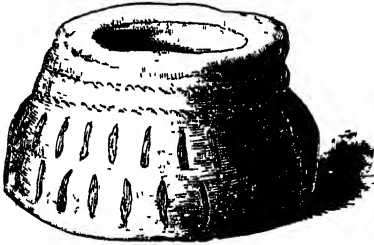


189. Celtic Urns.

partment, and illustrate the noblest and most beautiful achievements of ceramic art in all the ages. Thousands of families are supported by the industry; large districts with crowded populations are wholly occupied with it; colossal fortunes have been amassed; and wealthy potters have been public benefactors.

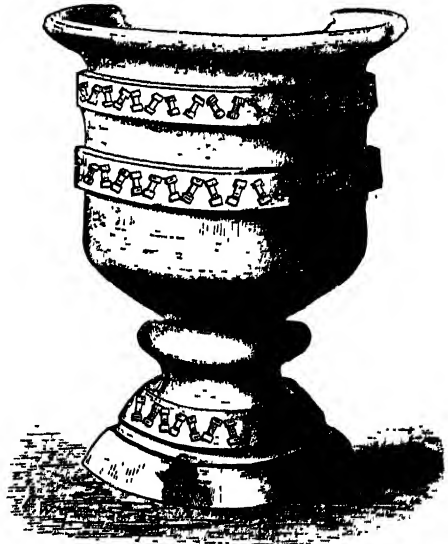
If we seek the immediate cause of this wonderful change, it is to be

found in the cultivation of artistic taste by those intelligent men and women of England who, for the past hundred years, have devoted attention to the study and collection of pottery and porcelain. The industrial interests of England are as largely indebted, during the last twenty-five years, to the gentlemen whose works we have so frequently quoted in these pages as to the inventors of engines, looms, or telegraphs. When the old ladies of England were ridiculed for their enthusiastic devotion to "old china," their critics knew very little of the latent force which rested in a cabinet containing a few old



190. Celtic Incense-cup.

teapots and cups and saucers. A Chinese turquoise kylin was a hideous object to one who did not appreciate the rarity of the color; but that color on a few costly specimens impelled the potters to discover its composition, and, when reproduced, gave bread and clothing to a hundred families. But for the collectors of England, the people of England and America might have gone on a century longer, eating from cheap Delft ware or pewter dishes. There can be no better illustration of the importance and value of art study and art collections with regard to the commercial interests of a people. The policy which has been pursued in America is sadly in opposition to this great truth in political economy. The heavy duties imposed on decorated potteries and porcelains have practically excluded them from American homes without resulting in the establishment of a solitary artistic pottery in the United States. As a rule, the people of this country have never seen the superb products of European art for household ornament and table use; and until the people become acquainted with these, no industrial progress in ceramic art can be expected in America.



191. Romano-British Cup: red ware.

The history of the art in England may be summed up briefly. Celtic,

Roman, Saxon, and Norman potteries were succeeded, in the seventeenth century, by stone-wares and soft potteries, in imitation of the poorer classes of German and Delft products.



192. Romano-British Urn. (From Castor.)

A slight artistic progress was visible until, in the early half of the eighteenth century, Josiah Wedgwood, the first student of art among English potters, introduced improvement after improvement, and achieved that great result of commercial industry, the production of beautiful art at a cheap rate. One and another porcelain factory was established, and some good, some very beautiful work produced; but these porcelains, if beautiful, were always expensive, and the general standard of ceramic art in

England was below that of the Continent, except in the wares made by Wedgwood and those who followed his lead. Chelsea, Derby, Worcester, and other factories made occasional work worthy the best Continental potteries, but these were exceptional products. The public taste, even of the educated classes in England, was not of the highest order in the last and early part of this century; and the prevalence of ugly imitations of Oriental decorations, or of gaudy, stiff, ungraceful masses of gold and color, attests the want of opportunity to know what delicious works the Continental factories were at the same time producing.

When public museums began to show the people of England what ceramic art had done in ancient and modern times, and when the old collections in private hands which had been ridiculed by writers whose knowledge and views were limited, came to be exhibited in loan departments of museums, a new era began in English ceramic art. Factories which had for more than a half-century produced good plain commercial wares, with occasional articles of great beauty, now entered into competition with the renowned fabrics of the Continent. Public taste was rapidly elevated and enlightened. A market



193. Romano-British Vase. (From Castor.)

for high art was established, and increased from year to year. The books of art students familiarized the people with the triumphs of painters and decorators in modern Italy, France, Germany, and Spain, and in old Greece, and the lands of the Saracens. The achievements of the art in all ages and countries were seized and utilized as aids to the new art in England. The result is the pre-eminence of English ceramic art in our day, and the creation of that vast commercial industry employing millions of capital, supporting thousands of families, and introducing beauty and abundant refining influences into homes all over the world. He must be wilfully blind who does not see in this history the clear evidence of the importance of art education to the commercial prosperity of a people, and the immeasurable value to a nation's industry of the free importation of the artistic productions of all other nations. The general wisdom or error of a protective-tariff system is not involved in this subject. Whatever be the view taken of that system, it is plain to every intellect that, to expect ar-



194. Saxon Jug.



195. Saxon Urn.

tistic industries in a community which excludes artistic products of other communities, is simply a modern illustration of the man in the ancient Greek fable of Hierocles who resolved never to go into water until he had learned how to swim.

The ancient potteries of England are numerous, the art having been abundantly put in use by the various tribes and races who possessed and governed parts of the British islands at different periods. Celtic, Romano-British, Saxon, and Norman potteries abound in tombs or barrows.

The Celtic remains are chiefly sepulchral urns, or domestic vessels, cups, bowls, and lamps, or perfume-burners. It has been supposed that they were made by the women, whose skill and ability they indicate. Formed like the pottery of nearly all savage tribes, they are of clay, sand, and pebbles intermingled, not baked with great heat, brown, unglazed, with black fracture. The burial urns have usually a deep rim falling downward.



196. Norman Jar.



197. Norman Jug. (Derbyshire.)

They are decorated with incised lines, diagonal, herring-bone patterns, in different arrangements. They are found usually inverted over the ashes of the dead as covers. Differences in shape, clay, and style of ornament seem to have characterized different tribes. The pottery was not made on the wheel, but by hand, and mouths of vessels are in consequence large, to admit the potter's arm. The urns vary in size from 18 to 25 inches in height, and 13 to 22 in diameter. Smaller articles are of the same general character. Handles are rare, knobs of clay perforated for a cord occurring in their place.

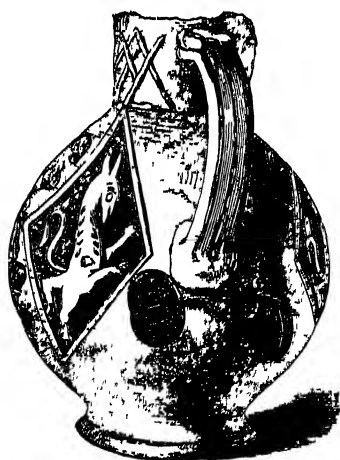
Similar potteries are found in England, Scotland, Wales, and Ireland. The Irish are better in color, and more elaborate in ornament, some of them bearing a remote resemblance to basket-work. They are found right side up usually, filled with bones and ashes. They have been found in eight or ten different places in Ireland, and each locality has wares marked by some peculiarity.

Some Celtic urns found in Staffordshire may be regarded as among the earliest known pottery of England, and the beginning of the long series

of Staffordshire wares which have continued in a remarkable succession, and become so illustrious in modern days.

The Roman invasion brought a different class of pottery art into England. At Castor, or Caistor, in the Upchurch marshes of Kent, and elsewhere, remains of kilns have been found, and specimens of wares. The Castor wares are more ornamented than those found elsewhere, having relief subjects—men, dogs, scrolls, etc. The manufacture must have been extensive during the Roman domination. The Samian or red wares of the Romans, of which specimens are frequently found in England, do not seem to have been produced here, but were imported from the Continent.

The Saxon potteries are not unlike the Celtic in some respects, consisting largely of burial urns. These have not the peculiar overhanging rim of the Celtic specimens, but have necks, are ornamented with incised bands and decorations, and occasionally with knobs or bosses of clay. Rare instances occur of a rude imitation of Roman ornaments. Small crosses and other patterns were made with a wooden punch or stamp, and a few decorations in white clay are known.



198. Norman Yellow-glazed Pitcher:
thirteenth century.



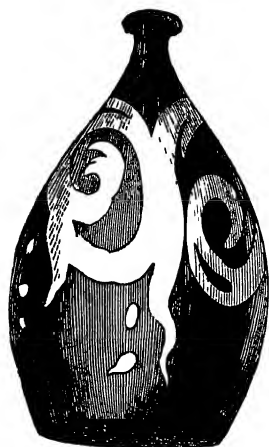
199. Norman Green-glazed Pitcher:
thirteenth century.

The Norman potteries indicate a small advance in art. This is well illustrated in the examples given. The first use of glaze in England now begins to appear. The Norman vessels were sometimes covered with a green glaze, which was also common in France at a later and probably

at this same period. Occasional specimens have relief or imposed work, as jugs which bear horseshoes and other ornaments, supposed to refer to the Ferrars family (Ill. 197).

For a long time after the Norman conquest little advance was made in the art of pottery. Tiles for pavements were made in Staffordshire and elsewhere. Telwright or Tilewright is an old name, known for some centuries in that district. These were the first pottery of England which can lay claim to importance in decorative art. The old churches of England were mostly paved with tiles of English fabric. These were better ware and of more artistic character than were made on the Continent, and, curiously enough, among them we find considerable indication of a knowledge of Saracen decorations. The tiles of St. Albans, decorated with re-

liefs, are of the thirteenth century. Of the fourteenth century are some tiles with patterns in relief, including inscriptions. Thus, one illustrated by Mr. Marryat, has upon it *Orate pro anima Domini Nicholai de Stowe Vicarii*. Another style was that in which the patterns are impressed in outlines, producing an admirable result in general effect. Indeed, we of the nineteenth century may take lessons in art from the potters of the thirteenth and fourteenth centuries in England. They were probably men of learning and taste in some instances, for it would seem that the potteries were sometimes attached to abbey, and the same skill and appreciation of art which are found in the illuminations are found in the tiles which the potteries produced. Prior



200. Medieval English Bottle.
Red, unglazed, white decoration.

Cruden's Chapel, at Ely, has tiles that were made by an artist (Ill. 201), and superb work is found in Ireland.

More common were red tiles inlaid with patterns in white, and covered with a yellow glaze which gave a rich tone to the whole, the red becoming brown. A great variety of these are found in old churches, with arms of lords of the State and of the Church, devices of various kinds, arabesques of simple but beautiful design, and a great profusion of patterns. The floors laid with these must have been very effective, judging from specimens in our own collection, and such illustrations as are found in Mr. W. A. Church's "Patterns of Inlaid Tiles from Churches in the Diocese of Oxford;" Shaw's "Specimens of Tile Pavements;" "Examples of Inlaid Gothic Tiles in Winchester Cathedral, Ramsey Abbey

Church," etc., published anonymously, and other works, in which these are reproduced in colors.

The Chertsey Abbey tiles, in Surrey, dating from the thirteenth century, are specially noteworthy (Ill. 202). These are round, having designs



201. Pavement Tile from Cruden's Chapel, Ely.

from old romances, with surrounding inscriptions, enclosed in rich borders. In the Chapter-house at Westminster is still to be seen a fine pavement, dating also from the thirteenth century (Ill. 204). More rare are tiles in which the pattern was painted with white clay and glazed, as in the example from Malvern Abbey (Ill. 203).

The domestic purposes, ordinarily served in our day by porcelain or pottery, were in England, as on the Continent, in the Middle Ages, supplied by silver, in the houses of the wealthy, and pewter and wood in those of the middle and lower classes. Wooden trenchers were common, even on the tables of people well to do in the world. Earthenware was used, as we know from numerous records, but its quality was probably coarse and common. Three hundred "picheriis" were paid for by the ex-

ecutors of Queen Eleanor, wife of Edward I., which were used "*die anniversarii Reginae*," and the price was 8s. 6*d.* for the whole. Glazed green and yellow wares were made, and sometimes a rude attempt at higher art is visible in decorations of the simplest sort, in white clay, under the yellow glaze. A lighter green was produced by covering the whole piece with a thin wash of white clay. Relief ornaments, made in moulds, were imposed. The glazed jugs and drinking-vessels were sometimes moulded in form of animals. A curious jug of this description, in the form of a mounted knight, is described, and the illustration given by Mr. Marryat



202. Tile from Chertsey Abbey.

forcibly reminds one of the Phenician figures found in great quantity by General Cesnola in the tombs of soldiers. This is of the thirteenth or fourteenth century.

Vessels for holding liquids were made of this lead-glazed ware in various parts of England. The *tyg*, or drinking-cup with two or more handles (Ill. 205), was made, with more or less ornamentation in relief, certainly as early as the sixteenth century. This cup, or mug, was often

large enough to satisfy the moderate desires of two, three, or four persons seated around it, each one of whom could lift it by his own handle and

drink from his own side of the rim. One in the Mayer collection, Liverpool, with four handles, is dated 1612. Another, in the Museum of Practical Geology, is dated 1621.

The importation of German stone-ware at the close of the sixteenth century had given new ideas to the English potters, and they began to make stone-ware which had some pretence to artistic appearance. Dutch workmen had come to



203. Tile from Malvern Abbey.

England in considerable numbers before the end of the sixteenth century, and among them were potters who established manufactories. In 1626, Thomas Roos and Abraham Cullyn received a patent for the making of stone pots and jugs of Cologne ware. Graybeards were produced, and varieties of jugs and mugs, probably many by these makers.

The English products of this period in common stone-ware so closely resemble the Continental that it is not possible to distinguish them by any characteristics. Even where English arms occur in the reliefs, it is



204. Tile from Westminster Chapter-house.

not certain that they were of English fabric. Several large jugs are known with the arms of Queen Elizabeth, one of which has the arms and name three times repeated, and date 1594. Another, however, has the same arms and date, with the arms of Cologne also.



205 Staffordshire Tyg: brown clay, lead glaze.

In the course of the seventeenth century the making of stone-ware was commenced at Iambeth, and possibly at Fulham. It was not introduced into Staffordshire till the latter part of the century, but, once commenced there, was rapidly improved. Before this time, common classes of soft pottery had been decorated in various colors, but known specimens cannot be assigned to a period before the middle of the seventeenth century.

Staffordshire, the clay country, had been the seat of potteries from the earliest times. The Staffordshire butter-pots, in which butter was sold in the markets, were of coarse pottery, but their size and quality were so important that an Act of Parliament, in 1661, regulated them to hold fourteen pounds of butter. They were $14\frac{1}{2}$ inches high by $6\frac{1}{2}$ in diameter, weighing not above six pounds; and it was ordered that they be of material so hard as not to take in moisture and increase their weight. On some are found, in relief, the names of Richard Cartwright and his son, who were potters at Burslem from 1640 to 1715, and, doubtless, honest men who put their names on their wares because people trusted them.

The English potters began, in the seventeenth century, to produce work resembling the Delft wares.

These, which had been largely imported, and were now extensively copied in England, were beginning to take the place of pewter, and even of



206. Staffordshire Posset-pot, decorated with clays of various colors.

wood, in domestic use, and the word "delft" or "delf" soon entered into the English language as about synonymous with what we call crockery. Mugs and dishes were painted with subjects in blue, with arms, mottoes, and with names of owners. "Anne Chapman, 1649," owned a mug now in the South Kensington Museum. "*Bee merry and wise*, 1660," says another. Jugs or bottles of white enamelled pottery had, painted in blue, the names of liquors, such as SACK and CLARET, usually with a date, between 1640 and 1660.

The Delft wares were made in Liverpool, as well as in Staffordshire, and probably in other parts of the country. The pottery was covered with a wash of white clay, which had a slight tint of blue or green, and on this the decoration was painted, most frequently in blue, and the whole was then glazed. This ware was made till quite late in the eighteenth century, and some of it is found in America, especially in New England. The prevalence of the blue-and-white ware has perhaps led to the making of an old story of a merry master-potter who was given to fiddling and rhyming, who, when his workman asked instructions for finishing ware, would say or sing,

"Tip it wi' blue,
An' then it 'll do."

Puzzle-jugs are among the relics of the pottery of the seventeenth and early eighteenth century, which were so constructed that when lifted to the lips they emptied their contents by a secret passage (Ill. 240). There were generally three spouts from the rim, the handles and rim being hollow. If the drinker covered two of the spouts with his fingers, he could drink with safety. Mottoes and homely rhymes were often on them. One has this:

From mother earth i took my birth,
Then form'd a Jug by Man,
And now stand here, filled with good cheer:
Taste of me if you can.

Another:

Here, gentlemen, come try y^r skill.
I'll hold a wager, if you will,
That you don't drink this liq^r all
Without you spill or lett some fall.

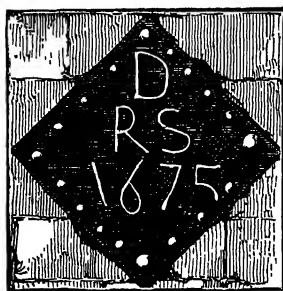
Another:

The ale is good, taste.

Posset was a fearful mixture except to those who liked it. Hot ale, milk, sugar, spices, bits or slices of bread or of oatake, went to make it. It was used on Christmas-eve, and the posset-pot (Ill. 206) kept for this

annual occasion had small chance to be broken, and was passed down from generation to generation. A coin and the mother's wedding-ring were dropped in it. The posset was drunk from a spoon. Whoso took up the coin had good-luck for the coming year, and the ring foretold marriage.

Wares decorated with color and glazed were made at an early period,

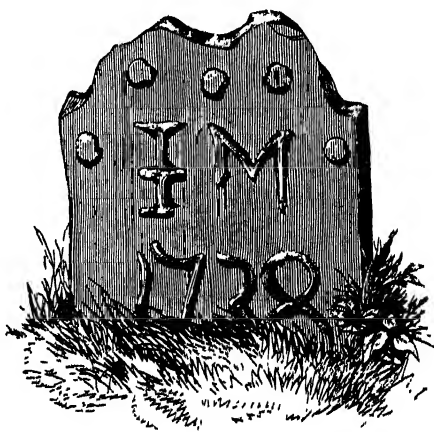


207. Tablet on a House at Burslem.

but known dates commence in the middle of the seventeenth century. There is an old house belonging to the Wedgwood family on which a pottery tablet (Ill. 207), with raised yellow dots, records the building in 1675. Mottled wares, made of mixed clays, were probably an early manufacture. Some of the old graveyards in and near the pottery districts contain interesting relics in the shape of mortuary tablets, memorials of the good folk, perhaps potters and their families, of the early part of the eighteenth century.

These are in soft pottery, unglazed, glazed, and marbled or mottled, illustrating varieties of wares.

The district in STAFFORDSHIRE known as "The Potteries" includes Tunstall, Longport, Burslem, Cobridge, Hanley, Shelton, Etruria, Stoke, Fenton, Lane Delph, Lane End, and several other seats of potteries less known, all these lying adjoining, and now forming an almost continuous city, for a distance of ten miles from the extreme end in one direction to that in the other. Early potteries abounded here. Butterpots and tygs are the earliest of the known Staffordshire wares. At what period the manufacture of glazed wares with color decoration began is unknown. The earliest products of this sort which are identified were made about 1670-'80. A large dish in the Museum of Practical Geology has a buff-colored



208. Mortuary Tablet: light-brown glazed pottery.

ground, in the centre a rampant lion crowned, sundry ornaments around him, a trellis-work border, all laid on in black and brown clay slip, the name Thomas Toft appearing in large letters on the rim. Another dish

(Ill. 211) has a crowned portrait of Charles II. Another has a mermaid; and a fourth a portrait.

Similar dishes bear the name of RALPH TOFT. On one of these is the date 1676; and on another, 1677. Other dishes of the same class have the name of WILLIAM SANS; and a similar one, with two full-length figures of a gentleman and lady in the costume of the Stuarts, has between them the initials W. T., and on the rim the name WILLIAM TALOR. All these dishes are lead-glazed, and date from 1670 to 1680.

The name of RALPH TURNOR is found on an old four-handled tyg, not certainly Staffordshire ware. A tyg, buff-colored, with designs in brown slip, resembling the Toft dishes, has the name of JOSEPH GLASS, who was a potter at Hanley in the latter part of the seventeenth and beginning of the eighteenth century.

About 1680, the art of glazing pottery with salt was accidentally discovered at Stanley farm, near Bagnall. A servant of Mr. J. Yale, or Yates, was preparing in an earthen pot, over the fire, brine to cure pork, and, having left it, during her absence the liquid boiled over, and the pot became red-hot. The sides of the earthenware were found to be glazed. This accident led to the adoption of the salt glaze



209. Mortuary Tablet: marbled pottery; glazed.



210. Mortuary Tablet: unglazed red pottery. Inscription white relief.

found to be glazed. This accident led to the adoption of the salt glaze

by a neighboring potter, a Mr. Palmer. It is effected by the simple process of throwing salt into the furnace when the wares are fully heated. He

applied it to the common brown wares which he made, and it was immediately adopted by other potters.

Where white and gray wares were made, the salt glaze was used for them, and a very interesting class of old English potteries are the salt-glazed stonewares. They were afterward moulded with extreme care, in styles resembling silver wares, and sometimes apparently in moulds prepared from metal pieces. Their manufacture was continued in va-



211. Early Staffordshire Dish.

rious potteries for a long time after the use of enamel was introduced. The name of "Crouch ware" was given to them, and they have also been erroneously called "Elizabethan ware." Specimens are not uncommon in America, but are generally of late periods. Many country-houses have mugs, teapots, and other articles of white salt-glazed wares, with relief borders, sometimes colored in green or yellow.

About 1690, at BRADWELL, the first pottery was established which has importance in the art history in England. John Philip Elers, who came over with the Prince of Orange, was a man of good family. His grandfather, an admiral, had married a princess of the Baden family. His father was ambassador from Holland to various European courts. He is said to have been a man of ability and some chemical and mechanical knowledge. He was the first inventor of new

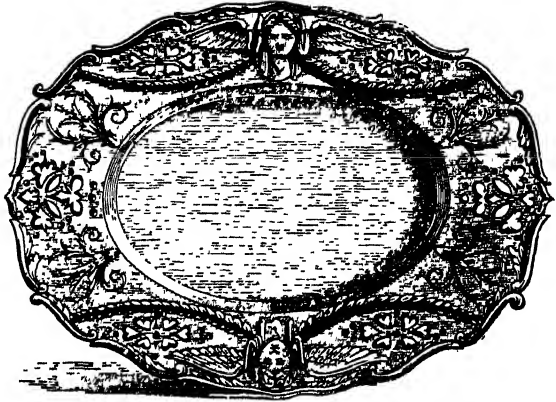


212. White Salt-glazed or Crouch-ware Mug.

styles of pottery, in the long list of inventors who have made England famous, and to him is accorded the honor of leading the art out of semi-barbarism into its track of later splendor. Possibly an exception should be made in favor of Dr.

Dwight, of Fulham; but whatever he accomplished seems to have perished with him, and had no visible succession or influence on English art.

With John Philip Elers was associated his brother David. They introduced good patterns of pottery wares, fine ornaments from well-cut moulds, and at length discovered how to make imitations of the red wares of Japan, which had made their appearance in the English market. These they made from a clay they found near Bradwell, which they worked with great skill and care. Their pieces were decorated like the Japanese, with small ornaments in relief, were beautiful in shape, even and fine in surface. They also made black wares, which were the forerunners of the basaltes of Wedgwood. They pre-



213. White Salt-glazed or Crouch-ware Dish.



214. Elers Ware.

served the secret of their wares with great caution; it is even said they employed only the most stupid and semi-idiotic workmen. Tradition says that a potter, Astbury, of Burslem, feigned idiocy, obtained employment from them, and after some years of work, making private notes and drawings of machinery, and learning all the processes, left them and established a pottery.

Another potter, Twyford by name, became possessed of their secrets, and others soon acquired them. The Elers brothers, finding now many rivals, ceased work about 1710, and went to London, where, it is said, they were concerned in some way with the founding of the Chelsea porcelain works. A granddaughter of John Philip Elers was the mother of Maria Edgeworth.

The influence of Elers on the Staffordshire potteries was immediate. They began to make wares in better forms and with better decoration. It is impossible to assign unmarked wares of the time to particular makers, for rivalry in trade led every one to copy whatever his neighbor produced that was popular. Marks were not in use to identify wares. In 1720, a Shelton potter, Astbury, who had robbed the Elerses of their secret, or his son Thomas, or, as Mr. Wedgwood states in one of his letters, a potter named Heath, while stopping at an inn on a journey, asked the hostler to do something for his horse, whose eyes were sore. The hostler heated a flint, threw it into water, pulverized it to a fine white powder, and applied it. Whether the horse was helped does not appear; but Astbury had discovered the white flint stone-ware made by the use of pulverized flint, always afterward of great importance in pottery. Mixed with sand

and clay, and colored with manganese, copper, and other materials, it also produced the "agate" and "tortoise-shell" wares, which were manufactured with great success.



215. Elers-ware Teapot.

An English potter, visiting Paris at this time, learned that plaster-of-Paris could be used for taking casts and making moulds, which in England had before been expensively cut. This en-

abled the potters to mould pieces of the new wares in relief, and to mould reliefs for application to any pottery. The paste made with flint was colored in a variety of shades—brown, drab, and cream-color.

In 1733, Ralph Shaw, a Burslem potter, took out a patent for making a salt-glazed ware, chocolate color, striped with white outside, and inside white. His method was nothing more than covering interiors with a white wash, and exteriors with a slip of flint and pipe-clay. This Mr. Shaw annoyed his neighbors by frequent accusations of violations of his patent, and did at length commence a suit, which the potters united in defending. It came to trial before a jury at Stafford in 1736, and the potters proved the history of the process, showing that it was practised by Astbury before Shaw. The jury found for the defendant, and the judge dismissed a court-room crowded with waiting ceramists of Staffordshire with the memorable utterance, "Go home, potters, and make whatever kind of pots you please." They obeyed the advice; and the improve-

ments in the art, which had been repressed by fear of the patent-holder, went rapidly forward.

New pastes, and new varieties of old pastes, were introduced; and from time to time since then English potters have produced many wares, which may be said to lie midway between pottery and porcelain, but which must be classed as stone-wares under hard pottery.

The Wedgwoods were a family of potters at BURSLEM. Aaron Wedgwood was a potter there in the seventeenth century. His son, Dr. Thomas Wedgwood, made the common wares of the early part of the eighteenth century; and his grandson, Thomas Wedgwood, junior, made varieties of "marble," of "agate," "cauliflower," and "melon" wares—names given to fabrics which were decorated in imitation of these stones and vegetables, and made by many of the potters of the time. Richard Wedgwood, another son of Aaron Wedgwood, made stone-wares.

Aaron Wedgwood, junior, son of the first Aaron, was a potter at Burslem till 1743. Shaw (*"Chemistry of Pottery"*) says that in 1690 he improved the Crouch ware, originally made of common potter's clay and "grit from Mow-cop," by using marl instead of the clay. His son, Aaron Wedgwood the third, succeeded him, and, with his brother-in-law, William Littler, made experiments in porcelain.

Thomas and John Wedgwood, sons of the second Aaron, first employed by their father, made pottery on their own account about 1740, retiring in 1769. Thomas afterward was a partner with Josiah Wedgwood.

His son, Ralph Wedgwood, was an ingenious man, of scientific tastes. About 1790 he made pottery, the firm name being WEDGWOOD & CO. In 1814, this Ralph Wedgwood invented an electric telegraph, which he urged on the Government without success. He published a pamphlet on this invention, dated May 29th, 1815, which seems to have escaped notice, in the many discussions and suits at law relating to Professor Morse's invention. His claim



210. Josiah Wedgwood's first Teapot, preserved at Etruria.

is the only one of which we have knowledge which is in the express terms of Professor Morse's claim—to wit, the invention of the actual operation of "writing at a distance." He states that by his invention "facsimiles of a despatch written as, for instance, in London, may with facility be written also in Plymouth, Dover, Hull, Leith, Liverpool, and Bristol, or

any other place, by the same person, and by one and the same act. While this invention proposes to remove the usual impediments and imperfections of telegraphs, it gives the rapidity of lightning to correspondence when and wherever we wish, and renders null the principal disadvantages of distance to correspondents." Lord Castlereagh, on behalf of the Government, declined the offer of the inventor on the ground, substantially, that Waterloo had rendered it unnecessary to improve the old telegraph



217. Mr. Thomas Bentley. Wedgwood medallion: jasper-ware. White on blue.

system. Could he have looked forward to the year 1877, when England depends on regular telegrams from the heart of Asia and from her Indian possessions, he would perhaps have decided to look into it.

Other Wedgwoods were potters in Burslem, but there is no interest connected with any of them except Josiah Wedgwood.

THE WARES OF WEDGWOOD.—The middle of the eighteenth century found the potter's art in England ready for instruction. Porcelain had

been made at Bow about 1740-43; at Chelsea, about 1745; at Derby and at Worcester, in 1751. But in England, as on the Continent, there was very little that was new in the art. The porcelain factories were content to reproduce what had been done in China and on the Continent. The pottery-makers had ample sale for the ordinary useful articles which they made in soft pottery and in salt-glazed stone-ware, and for their copies and imitations of the Delft, which were mostly copies of the Chinese. There was, however, a vast deal of energy and enterprise in the trade, and it was the moment for a great leader. It remained to be shown that the highest art of sculpture was applicable to the potter's work.

Josiah Wedgwood, the youngest of thirteen children of Thomas Wedgwood, was born at Burslem in 1730. At fourteen years old, in 1744, he was apprenticed to his brother Thomas, who had succeeded their father in the business. His apprenticeship expired in 1749, but he worked with his brother for some time, and then removed to Stoke, where he established a small business in making earthenware, knife-handles, agate and tortoise-shell wares, and where, in 1752, he entered into partnership with John Harrison in a pottery. Two years later, in 1754, he formed a partnership with Thomas Whieldon, an experienced potter, and this firm continued for five years at Fenton Low. Their fabrics were various, but chiefly such as Wedgwood had been making, and canliflower and melon wares. Wedgwood's attention was directed to the coloring of wares, and during this time he invented a rich green glaze for dishes made in leaf and fruit patterns. In 1759 he returned to Burslem, and commenced business alone in the "Church-yard Works," where he had learned his trade as an apprentice. Here he built up his fame and fortune. In 1768, he took into partnership, only in the ornamental branches of the work, Thomas Bentley, of Liverpool, who had been his agent in that city, and who was eminently fitted, by taste and knowledge of the business and of art, to be his associate.

In 1769, the factory was removed to new works, which Mr. Wedgwood had erected, on a large scale, near Burslem, and to which he gave the name Etruria.

In 1780, Mr. Bentley died. About 1781, Flaxman was engaged as an artist to make designs or models. In 1790, John, Josiah, and Thomas, sons of Mr. Wedgwood, and Thomas Byerley, his nephew, were taken into the firm, under the name "Josiah Wedgwood, Sons, & Byerley." Josiah Wedgwood, senior, died January 3d, 1795.

In 1800, the firm consisted of Josiah Wedgwood (the son) and Thomas Byerley. In 1810, Byerley died. In 1823, Josiah Wedgwood (the son)

took into partnership his eldest son, Josiah, and the firm name was "Josiah Wedgwood & Son." Under this name, changed to "Josiah Wedgwood & Sons," the business is still carried on by the descendants of the great Josiah.

This sketch of the history of the Wedgwood factory is important. The work made by the founder himself is, of course, prized for historical reasons; but the death of the first Josiah did not affect the artistic



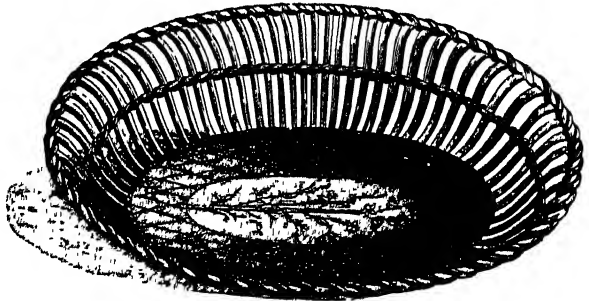
218. Mrs. Wedgwood. Jasper medallion, by Flaxman.

character which he had stamped on the products of Etruria. Wedgwood ware was equally beautiful for a long time after his decease; and while in some styles the modern work is not equal to the old, in other departments it is fully as artistic, and in not a few superior.

To Josiah Wedgwood the ceramic art in modern times owes more than to any other person. He was a man of remarkable energy and great shrewdness in his business. Having had no education, he nevertheless appreciated art, and his need of knowledge as the tool to accomplish the object which he kept constantly before him. This object was to be successful in his business, by producing, as had never been done, the

beautiful and the useful, and thus creating a trade in the products of the potter's furnace which had not before existed. He pursued this object throughout a long and successful life, becoming the benefactor of the people who surrounded him, and revolutionizing the ceramic art in Europe. The world is under as great obligation to him for the present advanced state of artistic taste and knowledge in Europe and America as to any artist or author of the last or present century. Having cultivated his own taste by study, adding constantly to his store of artistic knowledge, watching withal the varying moods of popular taste, and ingeniously leading and guiding these moods, he made the most exquisite products of the sculptor's art in all ages familiar to every household, so that the workmen in English shops and laborers in the fields could use, for buttons and ornaments, gems of the glyptic art of the best ancient artists.

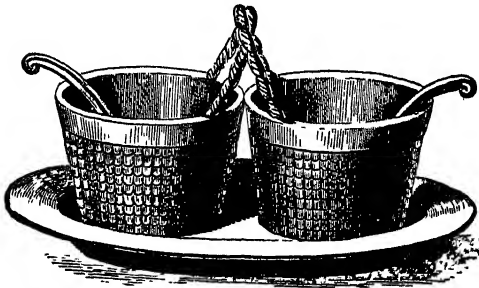
He began life, as we have seen, in the humblest way. He increased his small trade at Stoke by making black-glazed ware, and plates and dishes of a kind commonly called tortoise-shell ware. It was a soft pottery, colored with brown and yellow glaze, in which other colors were also visible. Other potters were making the same wares. His first ambition was to excel the others in the ordinary products of the shop; and, after doing this, he invented new wares.



219. Wedgwood Cream-color Basket-dish.

Cream-ware, or cream-color ware, was made in England long before Wedgwood's day. It was first made from a mixture of marl and flint, and improved by various manufacturers from time to time. Wedgwood introduced Cornwall clay in the composition, improved the methods of manufacture, and gave it a pure and unequalled glaze. The color of his ware varies from a light-straw to a deep-saffron yellow. In 1718, he wrote to his clerk in London, "I endeavor to make it as pale as possible to continue it cream-color, and find my customers in general, though not every individual of them, think the alteration I have made in that respect a great improvement. But it is impossible that any one color, even though it were to come down from heaven, should please every taste, and I cannot regularly make two cream-colors, a deep and light shade, without having two works for that purpose." The cream-ware was fired

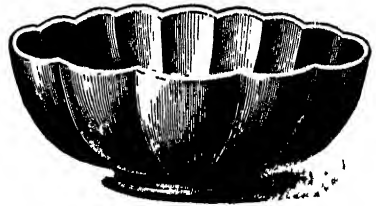
twice, being dipped in the glaze after the first firing. The glaze was a composition of flint, lead, and earthy matter, and is in reality a pure glass.



220. Wedgwood Cream-color Ware.

The cream-ware was sold undecorated, or with paintings, or with transfer prints. It is a curious fact that as Wedgwood had no means of doing the printing, the undecorated ware was sent to Liverpool, to Sadler & Green, once a fortnight, there to receive the transfer prints, and brought back to Burslem for the final baking.

The cream-ware changed its name to queen's-ware when a service was made for the queen. In 1762, Wedgwood presented a candle and breakfast service to Queen Charlotte, who liked it so well that she ordered a complete table service of the same ware. Patterns were submitted to her, and on her approval the pattern chosen was called "Queen's Pattern." The king then ordered a service with slight variation, and this was called the "Royal Pattern." This may be regarded as the foundation of Wedgwood's pecuniary success. Orders poured in on him. With increased means, he was at liberty to make more expensive experiments. He im-



221. Wedgwood Cream-color or Queen's Ware.



222. Wedgwood Cream-color Ware. Cup and saucer, with autumn leaves.

proved the queen's-ware while he was seeking new bodies. He employed good artists. While the painting, especially of leaves and flowers, was well executed, the great beauty of this ware is in those delicate and exquisite borders, in monochrome, which have wonderful effect on the soft background of the glaze. Simplicity is a prominent characteristic of the Wedgwood decorations. At the same

prominent characteristic of the Wedgwood decorations. At the same

time, beauty of form was so carefully studied that the undecorated ware presents many of the most desirable specimens for collections.

Black ware had long been made in England. In 1766, Wedgwood invented a body, composed of clay, iron-stone, ochre, and oxide of manganese, which he called "a fine black porcelain," and to which he gave the name *basaltes*. From this he formed vases, busts, table services, seals, medallions, bas-reliefs, and articles in various forms. Specimens are found in two shades of black, some having a polished, others a dead surface. The polish was produced in two ways—on the lathe, and by the use of a lustre varnish baked in. The latter are the older pieces. Black vases of this body were painted in Greek style, with encaustic colors baked in, and are called Etruscan. The use of the engine-lathe in potteries was an idea of Wedgwood, and enabled him to produce such effects that his example was soon followed, and the use became common.

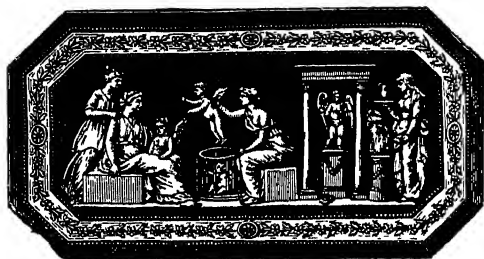


223. Wedgwood Antique Vase. White on black

About 1763, Wedgwood had turned his attention to improving wares which were made in variegated colors resembling various minerals. It had been customary to paint objects with colored clays, and Wedgwood in his earliest work followed this custom, but afterward adopted the plan of intermingling the clays in the paste, so that the body of the article should be veined with colors. He continued to use both processes. He called these wares "Pebble Wares," and in a letter to Mr. Bentley, in 1770, suggested a series of subdivisions: "Suppose we call those barely sprinkled with blue, and ornaments gilt, Granite; when veined with black, Veined Granite; with gold, Lapis Lazuli; with colors and veined, Variegated Pebble; those with colors and veined without any blue sprinkling, Egyptian Pebble." The varieties of the pebble ware as now known are, Serpentine, gray and green; Agate, brown and yellow, with sometimes gray and white; Verd-antique, dark green, gray, and black; Green Jasper, green and gray; Gray Granite, white and black; Red Porphyry, white on red. In these wares were produced vases, candlesticks, flower-pots, plates, and other objects.

But the greatest of Wedgwood's improvements was the invention of the pastes commonly called "Jasper-ware." This was a subject of much study and labor with him, and the composition varied from time to time.

In 1774, he announced "a fine white terra-cotta of great beauty and delicacy, proper for cameos, portraits, and bas-reliefs," and in the



224. Wedgwood Cameo: jasper. White on pale blue.
(T.P. Coll)

1787 edition of his catalogue he thus describes it: "JASPER, a white-porcelain bisque of exquisite beauty and delicacy, possessing the general qualities of the basalt, together with that of receiving colors through its whole substance in a manner

which no other *body*, ancient or modern, has been known to do."

In the same catalogue, of 1787 (which does not include his queen's-ware), he mentions various "bodies" or compositions in which his work was executed, as (1) Terra-cotta, resembling porphyry, granite, Egyptian pebble, and other beautiful stones of the siliceous or crystalline order; (2) Basalt, a fine black-porcelain bisque; (3) White-porcelain bisque, the same as No. 2, except in color; (4) Jasper (described as above quoted); (5) Bamboo or cane colored bisque porcelain of the same nature as No. 3; (6) A porcelain bisque of extreme **HARDNESS**, little inferior to that of agate, resisting the strongest acids and corrosives, impenetrable to every known liquid, adapted to mortars and chemical vessels.



225. Wedgwood
Ear-ring Drop.
jasper.



226. Wedgwood
Vase: jasper
White on pale
green.

In addition to these wares he produced a red ware, on which he experimented, varying the tint, but never reaching a high degree of beauty except in specimens of red on black, which are admirable. He also made an ordinary earthenware of a very pure white color, to which he gave the name of "Pearl-ware."

In 1777, he introduced the use of his "jasper wash," which consisted in covering only the surface of the ware with the colored paste. It would seem, from a letter of Wedgwood to Bentley, that his object was economy, or, perhaps, rather to use a more expensive cobalt, and thus give a finer surface color without increase of cost.

The jasper medallions were of various sizes, and for an infinite variety of purposes, ornamental and useful. The smaller cameos were sold set in steel and gold mountings, or unset, for buttons, seals, watch-keys, lockets, and other

trinkets, or for furniture to be inlaid. Large plaques in bas-relief were made for chimney-pieces and other architectural uses, for ornamenting cabinets and bookcases, and for framing as cabinet pictures. The sizes of the plaques and medallions varied from the smallest, less than an inch in diameter, up to twelve by twenty-seven inches. The 1787 catalogue states that the buttons were "worn by the nobility in different parts of Europe." Lady Diana Beaclerc and Lady Templeton allowed Mr. Wedgwood to use original designs by themselves, some of his reproductions of which are among his most esteemed work. Various groups of boys by Lady Beaclerc; Domestic Employment, Sportive Love, Charlotte at the tomb of Werther, Contemplation, all by Lady Templeton, are among these. Heads and busts were made in black basalt and in jasper. One series of 253 heads of popes were made in small cameos of jasper; another series of 63 kings of France, another of kings of England.

While the smaller articles were cheap, and placed the most exquisite works of art within reach of every class, the larger articles were proportionately cheap. The prices of heads were from one shilling to a guinea each. Vases in the terra-cotta ware resembling stones, and varying from six to twenty inches in height, were from seven and sixpence to three guineas. They were made in sets of five, at from two to six guineas the set. The small cameos were sold at sixpence, and cheaper when in sets. The series of popes were sold in sets at threepence each. Wedgwood advertised that he would model portraits in wax for any desiring them, three to six inches in diameter, at from three to five guineas each, and furnish any number of copies in jasper-ware at a half-guinea each.

Wedgwood was a man of artistic taste as well as a practical potter. He knew what was beautiful in form, color, and combinations of colors.



227. Rev. John Wesley. Wedgwood jasper medallion. White on blue.

He appreciated able artists, and was himself fully capable of criticising their work, suggesting ideas, directing form and design. He was in advance of the English world and taste in the study and love of the antique. No work on ancient art which could furnish him with information or patterns escaped him. His catalogues are themselves wonderful, as they exhibit the extent of his researches in ancient and modern art for originals to be reproduced in busts, medallions, cameos, intaglios, and bas-reliefs. He borrowed engraved gems wherever he could find them, copied them in jasper of various colors, produced many beautiful original works from models or drawings of artists and amateurs of his own time, and made the noblest efforts of artists in all ages familiar to the people of England and Europe.



228. Wedgwood Ear-ring
Drop · jasper.

His fabrics he exported to all parts of the world ; and Italy, which had, a few centuries before, been the art teacher of Europe, received from him a repayment so great that perhaps more of Wedgwood's work is to be found in Italy than in any other country.

Travelling in the interior, we have been astonished at finding beautiful specimens in obscure little inns. The Neapolitan factories of Giustiniani and Del Vecchio were roused by the large importations of these wares to imitate and copy them, and some very beautiful ware, not inferior to Wedgwood, was the result.

Other English factories also sought to follow in the footsteps of the great ceramist. But his strides were too long for them, and, with the exception of those who were educated in his own workshops, none succeeded in closely imitating him. But his influence gave life to art in England.

The products of the Wedgwood factory include articles in nearly every form known to ceramic art. The collector who chooses to confine his studies solely to this factory may gather as great a variety of objects of beauty as if his collection represented all the works of all times ; and, so very rare have some of the objects now become, he may find occupation for a long life without reaching the completion of his desired collection.

A glance at the catalogue of 1787 will show the extent to which, at that time, Wedgwood had carried his illustrations of art. He divides the objects offered for sale into twenty classes. Class I. includes cameos and intaglios ; Egyptian, Grecian, and Roman mythology ; ancient philosophers, sovereigns ; fabulous age of Greece ; war of Troy ; Roman history ; masks, chimæras ; illustrious moderns, and miscellaneous subjects. The numbers of the cameos run up to 1764, and of the intaglios to 394. Class II. includes bas-reliefs, medallions, tablets, etc. These are of sizes varying

from one inch by two to twelve inches by twenty-seven, and number 275 varieties. Classes III., IV., and V. include kings, illustrious persons, and scenes in Grecian, Egyptian, and Roman history, down to the removal of the seat of empire to Constantinople. Class IX. includes kings of England and France. Class X. includes heads of illustrious moderns. Class XI. includes busts, varying in height from four to twenty-five inches; statues and figures two feet high and downward in size. Class XII. includes lamps and candelabra. Class XIII. includes tea and coffee equipages, all in bamboo-ware, basaltes-ware, or jasper-ware, polished (not glazed) within. Class



220. Wedgwood Cameo: jasper-ware. White on blue.

XIV. includes flower and root pots. Class XV. includes ornamental vases of antique forms in the terra-cotta resembling agate, jasper, porphyry, and other variegated stones of the crystalline kind. Class XVI. includes antique vases of black porcelain, or artificial basaltes. Class XVII. includes vases, pateræ, tablets, etc., with encaustic paintings. Class XVIII. includes vases, tripods, and other ornaments in the jasper. Class XIX. includes inkstands, mortars, paint-chests, eye-cups, and chemical vessels. Class XX. includes thermometers for measuring strong fire, or the degrees of heat above ignition: this instrument, known and used still as Wedgwood's pyrometer, being an invention of Josiah Wedgwood, by which the temperature of a furnace can be determined accurately on the principle of the contraction of argillaceous substances in heat.



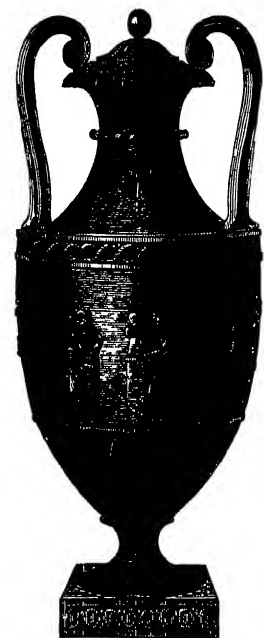
230. Wedgwood Vase: jasper-ware. White on blue. (T.-P. Coll.)

After the death of Josiah Wedgwood, the factory at Etruria continued its work in all respects as during his life, and many improvements were made. In 1808, Mr. Byerley produced the first soft-paste porcelain which had been made there. It was a very pure paste, white, decorated admirably, but the production was not long continued, and specimens are rare. Examples in our collection show decorations in Chinese figures and groups in medallions, on diapered green ground, rich blue, red, and gold foliage, like the Derby and other brilliant wares, and various popular styles of the day.

It is not easy to distinguish the works of the factory at different periods, since the form of the fac-

tory mark—the simple word WEDGWOOD stamped in the paste—has continued the same, with brief exceptions, from the time of the elder Josiah to the present day. In the medallion and cameo work, the old is, in general, better than the modern, because more carefully finished, less marked by defects, and in colors less pronounced and glaring. But it is far from true, as many enthusiastic admirers of Wedgwood are fond of asserting, that it is easy to distinguish all old work from the modern. All the work down to 1820, and even later, may be regarded as of great merit. The very modern cameos have more chalky-white surfaces, less sharpness of moulding, less of the careful undercutting of the figures and faces, and generally stronger ground-color. Where a medallion, bas-relief, or cameo presents these

characteristics, it may be supposed to be modern. There is also a difference in the feeling of the surface of the jasper-ware, the old being softer and more velvet like, which some persons can detect, and on which they rely; but to the ordinary collector this test is of no value. The marks, although substantially the same now as in the old time, are somewhat of an assistance; but it must be borne in mind that genuine specimens are often found without mark. In all cases, except on porcelain, the mark is impressed in the paste without color. The most common mark is WEDGWOOD, generally in small capitals, sometimes in an old-fashioned italic or script letter. Articles bearing the latter mark are very surely old. The mark Wedgwood and Bentley, in small letter, or in old italics, or in a circle with the word Etruria, is very good evidence that the piece bearing it dates of the time of that partnership, usually regarded as the best period of the factory. The circular mark appears frequently on vases, and an ingenious



281 Wedgwood Antique
Vase: black basalt-ware.

fraud is sometimes perpetrated with this mark. The foot of an old and genuine vase bearing the mark is connected with a vase made by some other factory. We have before us a very poor black basalt vase, with gross defects, such as no respectable factory would allow to go out, and which has probably been picked out of the refuse ware of some factory, to the bottom of which is affixed, by an iron rod and nut, a genuine Wedgwood and Bentley base or foot, with the circular mark.

Other marks, of which the signification is unknown, are found on

many Wedgwood pieces, in addition to the factory mark; sometimes under or over it, and sometimes distant from it. Capital letters, as O, T, D, DN, AOY, etc., in great variety are found. In cases where three or more capital letters are found thus on the piece, it is modern work (later than 1840). Besides these marks, there are numerous tool-marks—scratches, numbers, dots, etc.—none of which are of importance, except one style of mark. This is apparently made of subdivisions of a circle or of the letter O. It appears as a semicircle, or as one or two brackets (), or as two commas , , or as small sections of a circle. Miss Meteyard is of opinion that this mark in one or the other form indicates that the piece bearing it was made since 1810 and prior to 1830. In modern times the letters in the word WEDGWOOD are sometimes out of line, and the mark is carelessly impressed, which was not so often the case in the old marks. The letter o in WEDGWOOD was generally an exact circle of even thickness in the old marks, thus: **O O**, while in the modern it is, or seems, more elongated, and has thicker sides, thus: **O O**.

But the best advice to the collector which can be given is that he dismiss anxiety about the age of his specimens, and judge them by their artistic beauty. A modern Wedgwood plaque or cameo is as well worthy a place in any collection as an old one, if it equal the old in artistic work. And, as we have before remarked, the work made since the death of the elder Wedgwood is often equal and sometimes superior to the older work of the same pattern.

The porcelain made in Byerley's time is marked sometimes with the name impressed, and more rarely printed in blue or in red, always in capital letters. Marks intended to deceive purchasers have been used by other manufacturers to some extent. WEDGWOOD & Co., WADGWOOD, WEDGEWOOD, are specimens of fraudulent marks of this kind. The genuine mark has rarely been counterfeited. A Frenchman, J. Voyez, who had been in Wedgwood's employ, subsequently established a pottery and issued copies of Wedgwood ware, on which he placed the genuine mark. These were chiefly small cameos, seals, and intaglios, and were so few in number that they rarely occur. No rule can be given by which to detect them, except that in rejecting all specimens which are not the best work the collector will probably not retain any of the Voyez forgeries. We have recently found modern pottery, made about 1830-'40, with printed landscape decoration in pale blue, which seems to be English ware, of a genuine factory, with the mark, printed in blue, J. WEDGWOOD. It is not known who this manufacturer is.

In his ambition to reproduce the best works of the ancients, Mr. Wedg-

wood was led to project the reproduction of the BARBERINI or PORTLAND VASE, which has generally been regarded as his greatest work.

This vase was discovered in the seventeenth century in a tomb three miles from Rome, on the Frascati road. The tomb contained a sarcophagus of stone, within which was the vase, containing ashes. No inscription was found on sarcophagus or tomb, and various theories were suggested as to the person whose ashes it preserved. The first idea was that the ashes were the remains of the Roman Emperor Alexander Severus, but Winckelmann and others opposed this view. Antiquarians differed about it for a century, during which the vase remained in the library of the Barberini palace in Rome, and was for a long time supposed to be of stone, and ranked as a gem of the highest value. Bartoli called it a sardonix, De la Chausse an agate, Montfaucon a precious stone.



232. Form of the Portland Vase.

The subjects represented on the vase, in white relief on the almost black ground, have given rise to more discussion than its history. The illustration (232) shows the outline form of the vase. On the bottom is a very striking head, occupying a considerable part of the circle. Around



233. From the Portland Vase.

the vase, below the greatest diameter, is a scene, or a succession of scenes, one half of which is shown in Ill. 233. Various theories of various antiquarians down to the present century have been alike unsatisfactory in determining the subject; and it is safe to say that no one knows, or has yet offered a reasonable guess, of the subject represented.

In the middle of the last century it began to be suspected that the material was not stone, but a paste of some kind, and that it was possibly glass. Mr. Wedgwood's examination determined that it was glass. The bottom was a separate piece cemented on. The ashes had, perhaps, been thus introduced, the neck being too narrow to admit them. The colors were a deep dark-blue, almost black, ground, on which the designs were cut from a layer of opaque white glass, in cameo style.

On the sale of the Barberini library, the vase was purchased by Mr. Byers, of Aberdeenshire, who was then in Rome. He showed it to Sir William Hamilton, who describes the enthusiasm with which he bought it. "I eagerly asked, 'Is it yours? Will you sell it?' He answered,

‘Yes, but never under a thousand pounds.’ ‘I will give you a thousand pounds;’ and so I did.” He afterward wrote, “I have no doubt of this being a work of the time of Alexander the Great, and was probably brought out of Asia by Alexander, whose ashes were deposited therein after his death.”



234. Dr Erasmus Darwin. Wedgwood medallion: jasper.

Stories have been told in connection with the first sale of the vase, that a Barberini princess had lost money at cards, and parted with her most valuable antiquities to repair her losses; that the pope, hearing of it, forbade their exportation, but that the vase, being a small object, was easily smuggled out of Rome.

When Sir William Hamilton brought it to England, in 1784, the Duchess of Portland, an enthusiastic collector, at once pressed him to sell it to her, and the transfer was accomplished secretly. The duchess for

some reason concealed the fact that it had come into her possession; and on her death, about six months later, it was found among her effects.

In 1786 the museum of the duchess was dispersed by sale at auction, and in the sale catalogue the last lot but one is thus described:

Lot 4155.—The most celebrated antique vase, or sepulchral urn, from the Barberini cabinet at Rome. It is the identical urn which contained the ashes of the Roman Emperor Alexander Severus and his mother, Mammaea, which was deposited in the earth about the year 235 after Christ, and was dug up by order of Pope Barberini, named Urban VIII., between the years 1623 and 1644. The materials of which it is composed emulate an onyx, the ground a rich, transparent, dark amethystine color, and the snowy figures which adorn it are in bas-relief of workmanship above all encomium, and such as cannot but excite in us the highest idea of the arts of the ancients. Its dimensions are 9 inches and 3 quarters high and 21 inches and 3 quarters in circumference. A more particular account of this famous vase may be found in Montfaucon's *Antiquities*, vol. v., book ii., chap. vi.; in Sigr Bartoli's *des Sepolchri Antichi*; in the *Œdes Barberini*; in Wright's, Brevall's, and Misson's *Travels*; in Winckelmann on the *Arts of the Ancients*, etc., etc.

On the last day of the sale, June 7th, 1786, the vase was sold to the Duke of Portland (son of the late duchess) for one thousand and twenty-nine guineas. It does not appear what foundation there is for a current statement that Mr. Wedgwood was the principal bidder against the duke, and was induced to stop his advances on a promise of the latter to lend him the vase for his purpose of copying. But it is true that within a day or two after the sale Mr. Wedgwood received the vase from the duke, and gave him a written receipt for it and for a cameo medallion of Augustus Cæsar, which was in the same sale, with a promise to deliver them back on demand.

Before describing Mr. Wedgwood's work, it will be of interest to follow the history of this remarkable vase. Mr. Wedgwood retained it in his possession for a long time. In 1810 it was deposited in the British Museum by the duke, who retained his ownership of it, and the museum placed it in a glass case in the "Hamiltonian Room," where it remained on exhibition. On the 7th of February, 1845, while several visitors were in the room, a young man, one of the visitors, took up a piece of stone, an ancient sculpture, and hurled it into the case containing the Portland vase, breaking both case and vase to fragments. He was arrested, made no resistance, declined to give his name, was taken to prison, and, on being brought before a magistrate, still declined to give his name. He was an Irishman, about twenty-one years of age, of respectable appearance.

He confessed the act, expressed profound regret, stated that he had been indulging in intemperance for a week previous, was suffering under nervous excitement, a continual fear of everything he saw, and "it was under this impression, strange as it may appear, that I committed the act for which I was deservedly taken into custody." It appeared that he had lodged in Long Acre, where he went by the name of William Lloyd.

The British statute under which the prisoner was arrested, and which was known as the Wilful-damage Act, authorized the magistrate to impose a fine for compensation to the owner of the injured property "not exceeding the sum of five pounds;" and it was doubted whether, in case the value of the property was greater than that, the court had jurisdiction to impose any fine. To relieve the case of doubt, the British Museum proceeded against the prisoner on the charge of breaking the glass case, which was their property, and worth about three pounds, and the charge of breaking the vase was abandoned. The prisoner was accordingly convicted on that charge, and sentenced to pay a fine of three pounds, or, in default, to two months in the House of Correction. Being without money, he went to prison. It was afterward stated that he was a student, of good family, and that he concealed his name on their account as well as his own. A letter was received by the magistrate a few days later, enclosing three pounds to pay the fine, and the young man was discharged, and not again heard of. The vase was placed in the hands of a restorer, who gathered the fragments, and replaced them with great skill, so that the damage was almost imperceptible. It has always since been guarded by the British Museum with great care.

Immediately on receiving the vase from the Duke of Portland, Mr. Wedgwood commenced his labors, and with his accustomed antiquarian tastes sought, first of all, to gather all possible information about its history and the subjects of the relief work on it. He prepared and privately gave to a few of his friends a pamphlet, which abundantly shows his attainments. This pamphlet he subsequently reprinted, to accompany his reproductions of the vase. In the copy in my possession the preface is interlined and extended with some words in Mr. Wedgwood's autograph. This preface is as follows, the italics being his manuscript additions:

Mr. Wedgwood is endeavoring to collect all the accounts of the Barberini, *now Portland*, vase that have hitherto been published. He takes the liberty of submitting to his friends the present state of his collection; and will be very thankful for any further information they may be pleased to give him, or any other books they may direct him to in which this subject is mentioned; *that the account which he purposes to deliver with his copies of the vase may be as complete as possible.*

In the catalogue of 1787, Mr. Wedgwood expresses his obligation to the Duke of Portland for "entrusting this inestimable jewel to my care,



235. Dr. Priestley. Wedgwood medallion. jasper.

and continuing it so long, more than twelve months, in my hands." It would seem that at this time it was still in his hands, and it is matter of fact that for three years he labored at his copy. It was found that casts from the vase would not answer, as the shrinking of the ware in baking was very great, and the result would be a smaller vase. His chief artist and modeller Henry Webber, William Hackwood, William Wood, and others, worked on the preparation of moulds. The entire vase was, of course, modelled in larger size, for the purposes of the mould. Defective or

unsatisfactory copies were produced from time to time. In the latter part of 1789 he sent the first perfect copy to Dr. Erasmus Darwin, which is still in possession of his descendants.

In 1791, a copy was produced which perfectly satisfied Mr. Wedgwood, and this was exhibited in London, and sent abroad in charge of Josiah Wedgwood, junior, and Mr. Byerley, and exhibited in Holland and Germany. At this time Wedgwood wrote to his son that the price was not yet determined, but that it would not be prudent to fix it at less than fifty pounds. By 1789 twenty copies had been subscribed for, though no price was named. The subscription-list increased somewhat



236. Wedgwood Cameo: jasper. White on blue.

after that date, but it is not known that more than twenty copies were made during Wedgwood's life. It has been reported that fifty copies in

all were made, but no evidence of this exists; nor are the copies now extant, which are known to be of this early issue, alike. They vary in height from 10 to 14 inches. Some have higher polish than others. The white of some is pure, of others yellowish. Several were produced by the factory after the death of Mr. Wedgwood; and some of those of later manufacture, down to 1810, are fully equal to the earlier. The vase was again borrowed in 1800, and doubtless new moulds were made. The modern factory continues the production of the vase in three or more colors, and copies in various wares and various colors and sizes by other makers are innumerable.

The collector who seeks an original will do well not to pay a high price until he has familiarized himself with one or more known copies. The color should be nearly black, with a blue tint, the white reliefs soft as velvet, delicate in color, cut carefully under the edges like a stone cameo, and the height from ten inches upward. Some originals are numbered, but not all, and it is suggested that the numbered copies may be those from the moulds made in 1800.



237. Cameo: Wedgwood jasper White on pale green.
(T.-P. Coll.)

In 1872, at Mr. Parnell's sale, an original copy brought one hundred and eighty pounds. Another, which belonged to the poet Rogers, brought at his sale one hundred and twenty-seven pounds, and was sold again in February, 1875, for one hundred and ninety-one pounds, the highest price as yet known for this work.

LAMBETH.—It is probable that stone-ware were made at Lambeth as early as anywhere in England. Dutch potters are said to have settled there in or before 1640, and commenced the manufacture, which grew up until there were about twenty potteries there which made tiles, glazed potteries, and stone-ware. At the beginning of the present century, only one factory remained in operation, producing wares for apothecaries, and similar purposes, and some Delft ware.

In modern times the stone-ware product has revived, and Messrs. Doulton & Co. now make the greatest variety of artistic work in stone-ware, equalling, if not surpassing, all other makers in modern times.

FULHAM.—Dutch potters also established works for making stone-ware at Fulham, in the seventeenth century.

Mr. John Dwight, a gentleman of education, secretary, successively, to

Bishops Walton, Ferne, and Hall, of Chester, established a pottery at Fulham, at which he made stone-wares of a peculiar kind—his own invention.

It is claimed for Mr. Dwight that he was the English discoverer of porcelain, and that, in 1640 or 1641, he made successful experiments at Fulham. Dr. Plot, in his "History of Oxfordshire," published in 1677, recounts at some length the works of Mr. Dwight. He says he "hath discovered the mystery of the stone or Cologne wares, such as D'Alva bottles, jugs, noggins;" he "hath discovered also the mystery of the Ilesian wares and vessels for reteining the penetrating salts and spirits of the chymists;" and he "hath found ways to make an earth white and transparent as porcellane, and not distinguishable from it by the eye, or by experiments that have been purposely made to try wherein they disagree. To this earth he hath added the colours that are usual in the coloured china ware, and divers others not seen before." * * * "He hath also caused to be modelled statues or figures of the said transparent earth (a

thing not done elsewhere, for China affords us only imperfect mouldings), which he hath diversified with great variety of colours, making them of the colour of iron, copper, brass, and party-coloured, as some Achat-stones."

In 1671, Mr. Dwight secured a patent, on his representation that he had discovered "the mystery of transparent earthenware, commonly known by the name of porcelaine or china, and Persian ware, as also the mystery of the stone-ware vulgarly



288. Inkstand. Fulham stone-ware.

called Cologne ware." In 1684 his patent was renewed, reciting, as among his works, "white gorges, marbled porcelanne vessels, statues and figures, and fine stone gorges and vessels," and also that he had discovered the mystery of "transparent porcelanne and opacous redd and dark-coloured porcellane or china."

Dr. Plot's testimony would be more valuable were it not for a recollection of the many misunderstandings which have grown out of the sixteenth and seventeenth century use of the word *porcelanne*. This testimony is shaken, too, by his description of the coloring of this "transparent earth," which he describes as "of the color of iron, copper, brass, and

party-colored, as some Achat-stones," all of which, especially the marbled ware, resembling agates, seem more like pottery than porcelain. A single specimen of Dwight's "porcelain" would settle the question; but while his "statues" in pottery, admirable works, exist, no translucent specimen is known; and it is not likely, even if he produced experimental pieces of porcelain, that he continued its manufacture.

Statuettes and busts, of stone-ware, well modelled by Dwight, were preserved in the Dwight family until recently, and are in several collections. These include a life-size bust of Charles II., smaller busts of the same king and other persons, full-length figures of Flora, Minerva, Meleager, a sportsman, a girl with flowers, five stone-ware statuettes in imitation of bronze, of Saturn, Jupiter, Mars, and Meleager. These are probably what Dr. Plot called the transparent earth colored to resemble brass. A half-length figure of a dead child lying on a pillow, holding a bouquet, with a broad lace band across the forehead, is described as very fine—so fine, says Mr. Chaffers, that "the child seems almost to breathe again." This is inscribed in the paste, *Lydia Dwight, died March 3. 1672*. It is in the South Kensington Museum. Other articles of Dwight's stone-ware are bottles, one slate-colored, with marble bands, others entirely marbled; a mug, with a scene from Hogarth's *Midnight Conversation*; a butter-boat, and other objects. Many of the early stone-ware mugs and jugs, with medallions and initials of royal names, as C. R., W. R., A. R., & R., are assigned, with some confidence, to Fulham. Whether Dwight did or did not make porcelain, he was undoubtedly an accomplished ceramist for his time; and it is possible that further study of English wares will show that to him, in advance of the Elers brothers, of Bradwell, is due an influence leading to better art in English pottery.

After his death, the pottery continued, under the management of his daughter Margaret, with a partner, Warland, making chiefly the brown wares of commerce. It was suspended in 1746, but revived when she married William White, and continued in the White family until 1862.

Brown-ware pitchers or jugs, with hunting-scenes in relief, and with



239. Brown Stone-ware Jug (Fulham)

grotesque figures, monkeys, dwarfs, and various decorations, mugs, bottles, inkstands in the shape of heads (Ill. 238), and divers objects, were originated at Fulham, and very popular in the last and this century. They have been imitated in numerous potteries; and the style, especially a favorite handle, formed of a hound, has been reproduced for a long time at the Jersey City Pottery, and elsewhere in America.

A flip-can is preserved, which is an interesting relic of "Robinson Crusoe," bearing this inscription:

Alexander Selkirke, this is my one (own).
When you take me on bord of ship
Pray fill me full of punch or flip. Fulham.

The brown ware was made also at NOTTINGHAM, where a potter, Morley, worked in 1757. "Nottingham ware" was a familiar name for the mugs and other ordinary articles. Dated specimens are found from 1721



240. Puzzle-jug. (Nottingham)

to 1771. The ware is very hard, salt-glazed, and generally has a slight metallic lustre. It is decorated with incised lines of bands and flowers, especially pinks. Large punch-bowls, tobacco-jars, puzzle-jugs, bottles in the shape of bears, mugs, etc., are among specimens. Brown jugs like those of Fulham, the upper parts darker than the lower, dead glaze without lustre, are later. Names of owners are incised. These works were discontinued before 1800.

John and Christopher Heath made brown stone-ware similar to that of Fulham and Nottingham at COOK-PIT HILL, in Derbyshire, prior to 1750. A mug, a copy of the Fulham mug, with Hogarth's *Midnight Conversation*, is inscribed *William Heath, 1764*. Jugs with reliefs, superior in modelling and work, with subjects not found on Lambeth or Fulham ware, have been attributed to the Heaths.

BURSLEM.—The name *Ra. Wood* is found stamped on a statuette of Chaucer, and on another specimen, both in pottery. He was probably the father of Aaron Wood, and seems to have made wares in colored potteries

before 1750, when Aaron commenced work on his own account, having been previously apprenticed to Dr. Thomas Wedgwood, one of the numerous family of Wedgwoods who were potters. Aaron Wood made white stone-ware with the salt glaze. He was known as an ingenious engraver of moulds for these wares. It has been supposed that he was the inventor of the white ware known afterward as cream-ware, and after Wedgwood's improvements, as queen's-ware. Enoch Wood, who was called afterward



241. Old Staffordshire White Pottery Figures in blue, with yellow.



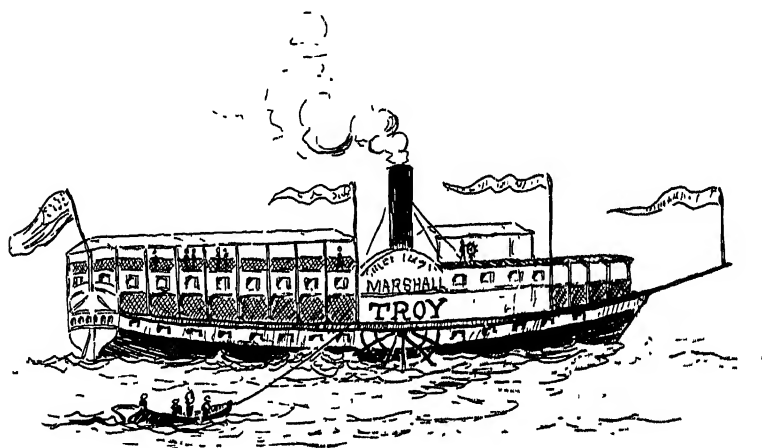
242. Shakspeare: Enoch Wood's ware.

"The Father of the Pottery," began business in 1784, and produced all the ordinary modern varieties of pottery. His specially important work was in statuettes, made of soft pottery, colored in good style. We have in our collection several of these, the best of which are—Shakspeare, 18 inches high; Milton, the same size; Benjamin Franklin, 15 inches high, wearing a dove-colored coat, yellow-embroidered vest, red knee-breeches, and white stockings. The decorator, probably in the haste of an order for several statuettes, having a variety before him, has named this last one, in gold, *General Washington*. We have seen another example of the same statuette, in which Franklin is dressed in a rich blue coat, with white vest and breeches, and a third, in which his costume is still different in color.

In 1790, James Caldwell entered the firm, now WOOD & CALDWELL, but retired in 1818, when Wood took three sons into partnership under the firm name, E. WOOD & SONS, which continued till 1846, when they closed the business,

Enoch Wood having died in 1840, aged eighty-three. Large quantities of ordinary pottery, decorated in blue, and other colored prints, by E. Wood & Sons, were brought to America, and among these are many good specimens well worth preserving. Some were decorated with prints of American subjects.

The illustration (243) which we give from a blue printed plate by E. Wood & Sons, serves a purpose to show the interest which may attach even to common wares. This appears to be one of a service made for a



243 Hudson River Steamer "Chief-Justice Marshall" (From a blue printed plate by E. Wood & Sons. T.-P. Coll.)

Hudson River steamboat. The same print appears on another plate in our collection with the name of the steamer changed. In this case it is the *Chief-Justice Marshall*, a steamer that will be remembered by many old persons as among the first to navigate the waters of the Hudson. They will remember, too, the custom of discharging and receiving passengers by a small boat, run out with a line from the steamer to the shore, and drawn back by the same line winding around the boat's shaft as she steamed on; a custom which led to accidents, and the enactment of a statute forbidding the attachment of the line to any part of the machinery.

Other printed wares in our collection form a series of illustrations of early steam navigation.

Daniel Steele, of Burslem, about 1802, made wares resembling Wedgwood's jasper. His name is impressed on medallion portraits, white on blue.

John Mitchell was a large manufacturer of white stone-ware, salt-glazed, at Burslem, in the early part of the last century.

John and Richard Riley began making ordinary domestic wares here in the last century, and continued work till 1827. Their white ware, decorated in dark-blue prints, marked *Riley's semi-stone china* in a circular belt, or simply *Riley*, is abundant in America.

John Lockett and Timothy Lockett made white stone-ware, salt-glazed, in various forms, in and after 1786. The name *J. Lockett* is impressed on wares. In 1802, they removed to Lane End.

John Walton (1806) made statuettes, groups, whistles, and toys. His statuettes are quaint and curious. We have by him Elijah and the Widow, a shepherd and shepherdess, Falstaff, and birds, and animals. The name WALTON, in a scroll, is on the back of the pedestals of Elijah and the Widow.

TUNSTALL.—About 1750, Enoch Booth made pottery here. His name is on a dish dated 1757. He is said to have introduced the use of fluid glaze. Anthony Keeling, his son-in-law, succeeded him, and in 1786 made queen's and other ware. The firm was later A. & E. Keeling. Mr. Chaffers is of opinion that the New Hall porcelain company purchased Champion's (Bristol) patent in 1777, and began to make porcelain in connection with Keeling that year at Tunstall. Mr. Owen, the historian of Bristol porcelain, says Champion did not sell till 1782.

About 1780, William Adams, who had been educated by Wedgwood, began work on his own account at Tunstall, and executed copies of Wedgwood jasper-wares, and work in similar style, which are often equal to the originals.

In 1786, the firm William Adams & Co. produced cream-ware and colored potteries, which are signed with their names.

G. F. Bowers made ordinary wares, signed G. F. B. in a knot.

Smith Child made queen's and other wares about 1763, the mark CHILD impressed.

LONGPORT.—Messrs. John & George Rogers made potteries for domestic use in the latter part of the last century and early part of this. We find the name ROGERS impressed on cream-ware and printed potteries, sometimes accompanied with the chemical sign for iron on stone-ware. This sign is a common mark on potteries, and unless accompanied by a name does not identify pieces as of any special manufactory.

The most important factory at Longport was one which Mr. John Davenport took in 1793. He extended the works largely, and produced a great quantity of ordinary and fine work in pottery and porcelain. The proprietor employed able artists, especially for flower-painting, in which the decorations of the porcelain especially excel. The works still con-

tinue. No English factory had produced more beautiful porcelain than this. Specimens are abundant in America, of very fine services, decorated with rich blue or yellow borders, and flowers on white.

COBRIDGE.—Ralph Daniel, of Cobridge, brought to Staffordshire the French practice of using plaster-of-Paris moulds. He was a potter; but we know nothing of his work. John Warburton, and his widow after his death, had a pottery here, where they made cream-wares. Mrs. Warburton was specially known for good enamelling, and previous to 1769 Josiah Wedgwood sent to Mrs. Warburton undecorated goods to be painted and enamelled by her.

J. and R. Clews were potters at Cobridge from about 1814 till 1836. They are well known to Americans from the quantity of their wares decorated with printed American scenes and portraits, which they made for this market. Their dark-blue decorations seem to have been favorites here. They made cream-ware decorated in relief patterns and colors, and also porcelain. Among their American decorations one of the most elaborate was the "Landing of Lafayette at Castle Garden," which they placed, in prints of various sizes, on dinner and tea services. Besides these, we have specimens of several services on which are American prints: among them a view of the old Stevens House at Hoboken; the White House at Washington, with names of thirteen States on the border; Entrance of the Erie Canal into the Hudson at Albany; the upper Ferry Bridge over the Schuylkill; Passaic Falls, and many others. Among their best printed work are the Wilkie Designs, as they were called, which are good character pictures in a very rich blue. This style of pottery, of the period from 1810 to 1830, decorated in dark blue, made by various English factories, was common enough in America forty years ago, but is now becoming scarce. It is not prized, except by a few judicious collectors, who recognize in it a color that is rarely surpassed on pottery; and, common as the ware may have been thought, it has ceased to be common—is, indeed, becoming rare—and collectors will do well to secure good specimens.

J. Voyez, a Frenchman in the employ of Wedgwood, superintending the manufacture of jasper-wares, was discharged for some cause. He was a man of ability, Josiah Wedgwood describing him as "a perfect master of the antique style in ornaments, vases," etc. Between 1770 and 1773, Voyez established himself in a pottery at Cobridge, where he produced jasper-wares in Wedgwood's style, intaglios and cameos, vases, tablets, statuettes, and other articles, some of which were remarkably fine. On some he placed the Wedgwood mark. While they are tolerably close im-

itations of Wedgwood's work, they are in general inferior. The objects with the counterfeit mark are always small cameos, intaglios, and other small pieces, and it is not probable that they were numerous. Few of the works of Voyez bear any mark. A jug in the South Kensington Museum has the name VOYEZ, and J. VOYEZ is stamped on another. The name also occurs on a vase made by Palmer at Hanley, who employed him in 1769.

HANLEY.—The names of E. Mayer and of E. Mayer & Son occur frequently on ordinary potteries found in America. Elijah Mayer established a pottery about 1770, and the firm ceased work in 1830. They made cream-ware, black basalt-like Wedgwood's, brown-line ware, unglazed terra-cotta with colored reliefs, and the common varieties of table crockery. Their black wares were sometimes moulded with high-reliefs. We have specimens commemorating Wellington and his battles. A well-known service was made in honor of Nelson and his battles, on which are pyramids, crocodiles, Britannia, Fame, and a monument with tablet. Mayer's black ware is sometimes met with in this country. The name of *Joseph Mayer & Co.* also occurs on some pieces in the Liverpool Museum.

White stone-ware, salt-glazed, was made at Hanley by Christopher C. Whitehead; and about 1780, Job Meigh took the works, and the firm of Meigh & Walthall succeeded him.

They produced work from designs by Garinelli, a sculptor, whose name appears on a specimen. The mark of their work was the name MERRI. Job Meigh, junior, received in 1823 the medal of the Society of Arts for a glaze free from the poisonous qualities of lead glaze when used for holding fruits and acid articles.

Lakin & Poole (established 1770) made black wares like Wedgwood's, cream-wares, and other pottery, including statuettes and groups.



244. Staffordshire Saucer: white ware, by Aaron Wood.

W. Stevenson, signing work with his name; Edmund J. Birch, signing E. I. B., and also *Birch*; Joseph Glass, John Glass, and John Glass & Sons (no mark); J. Shorthose, Shorthose & Heath, and Shorthose & Co., signing with their names; Ralph Salt, signing with his name; and Charles and Samuel Chatterly, were potters at Hanley, making various wares.

Henry Palmer (established about 1760), signing "H. Palmer Hanley," in a circle, made cream-ware, red engined ware, and black basaltes. He was the son of John Palmer, who first utilized the accidental discovery of salt glaze. He copied Wedgwood's patterns, and it was said his wife obtained, in London, Wedgwood & Bentley's new pieces, as soon as they appeared, for her husband to reproduce. Palmer went into partnership with Neale, the firm being Neale & Palmer, and they annoyed Wedgwood by their copies of his works—among others, his patented ware. He sued out an injunction, which resulted in a compromise, Palmer paying Wedg-

wood for an interest in the patent. His work was of the best class. Palmer failed in 1776, and Neale (signing "I. Neale Hanley," in a circle) continued the work. His products were also admirable. The firms of



245. Queen's-ware Bread-dish.

Neale & Wilson and Neale & Co. succeeded (1778-'87), and both names appear on excellent wares in Wedgwood's and other styles. When Neale died, Robert Wilson continued the works. He signed with his name, *Wilson*, and also with a O under a crown. The factory had increased in importance under Neale & Wilson, and its products were extensive in ornamental and useful wares. Ovals of Franklin and Washington are known marked *Neale & Co.* Common wares marked *Wilson* are abundant in America. The factory went through several hands, until 1830, when it became one of the many run by W. Ridgway, Son, & Co., whose products were at that time more largely exported to America than those of any other English potters, if we may judge from the quantity now found here.

The mark *EASTWOOD*, found on black and cream wares, is attributed by Mr. Chaffers to William Baddeley, at Eastwood, Hanley (1802-'22).

Richard Hollins (1750-'80), T. & J. Hollins, and T. J. & R. Hollins (1780-1820), Keeling, Toft, & Co. (1806-'24), made the ordinary wares of the periods.

Edward Keeling was a potter in 1786, succeeded, in 1802, by James Keeling, who about 1828 made wares with printed views of Oriental scenery, from the illustrations of Buckingham's travels in Mesopotamia. These are frequently met with in this country.

SHELTON.—Joseph Twyford, already mentioned as obtaining the Elers brothers' secrets, was a potter at Shelton. The mark I. T. is attributed to him. Astbury, the other person named in the same connection, made white salt-glazed wares here, and was succeeded by his son, Thomas Astbury. Samuel Hollins (1774) made red ware with relief ornaments, black wares, and other varieties.

The New HALL pottery at Shelton was taken in 1782 by a large company organized to make porcelain under Champion's patent, which they had bought. No examples of hard-paste porcelain according with the patent are known, but soft-paste porcelain was produced from an early time. In 1814, Peter Warburton, one of the firm, took out a patent for "decorating china, porcelain, earthenware, and glass with native pure or adulterated gold, silver, platina, or other metals fluxed or lowered with lead, or any other substance, which invention or new method leaves the metals, after being burned, in their metallic state."

Pink lustre was a frequent decoration on the New Hall porcelain, as well as prints in red and black, diapered borders, and painted decorations. The paste is generally clear, and very translucent. The mark was *New Hall*, within two circles, down to 1825, when the fabric ceased. Unmarked specimens may sometimes be recognized by the peculiar form of the pattern number on the bottom, in large, sharply drawn figures. New Hall tea services are common in America.

Job Ridgway & Sons were potters at Shelton before 1814, when the sons, John and William Ridgway, succeeded Job. They marked wares with the firm name, and with the letters J. W. R., making both pottery and porcelain. Their more modern marks are common on porcelains in America, and J. R., for John Ridgway, is found frequently in an oval under a crown, with the name of the pattern on a scroll. Brown, Westhead, Moore, & Co. are the modern proprietors. Old blue-and-white pieces by the Ridgway house have American scenes. In some cases the same pictures served for different places. We have the State House at Boston on one plate, and the City Hall, New York, on another, both views being of the latter.

R. & J. Baddeley (established about 1750), signing sometimes I. E. B. impressed, were succeeded by Hicks & Meigh, and Hicks, Meigh, & Johnson, who were succeeded by W. Ridgway, Morley, Wear, & Co. in 1836. The latter firm signed R. M. W. & Co.

Other potters at Shelton were:

W & J. HARDING, mark **HARDING** impressed;
 CHARLES BAGNALL, established about 1760;
 EDWARD PHILLIPS (only a decorator);

T. TWEMLOW (about 1770);
 THOMAS FLETCHER & Co., established about 1786
 (who only printed wares made by others).

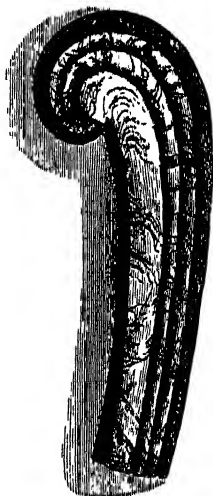
STOKE-UPON-TRENT.—About 1790, Mr. Thomas Minton, an apprentice to Turner, of Caughley, established works at Stoke, which have since become famous as Minton's works. Joseph Poulson, manager at Spode's, became his partner, and died in 1809. He made pottery, chiefly blue-and-white, until 1798, when a ware called "Semi-transparent China" was introduced, and made till 1811, then abandoned, and resumed in 1821. In 1817, Mr. Herbert Minton, his son, became a partner, and on the death of the father, in 1836, became sole proprietor. About 1840, Mr. Michael Daintry Hollins entered the firm, and later another nephew of Mr. Minton, Mr. Colin Minton Campbell.

The history of this factory is written in the innumerable beautiful products of the potter's art in every variety, ancient and modern, which it has scattered over the civilized world.

Josiah Spode, the elder, was an apprentice of Whieldon, at Fenton, in 1749. He took a pottery at Stoke about 1770, where he made cream and black wares, and jasper blue on white. He died in 1797, and was succeeded by his son Josiah, who in 1800 began to make soft-paste porcelain, which he improved in the paste by introducing bones, and produced in beautiful forms with great variety of decoration. Some of his

246 Agate-ware Knife-handle.

porcelain services are among the most delicious specimens of the art, while a large variety, not rare, show the best class of commercial work. His decorations of pottery were also fine, especially those in which Oriental tastes and colors were introduced, and the designs improved for English eyes. In 1805, he produced a ware called opaque porcelain, or iron-stone china, which was strong, serviceable, often decorated with brilliant colors, and highly popular. He made ornamental works in pottery and porcelain, and many of his vases are highly prized. Under his



247. Agate-ware Knife-handle.

management the factory became one of the most important in England. The "corner-stones" of the new parish church of Stoke were made by him, each sixteen inches by twelve: one of porcelain with an inscription and a view of the old church and town, one of brown porcelain, one of jasper-ware, one of iron-stone ware, and one of blue pottery. He died in 1827. His partner, Mr. William Copeland, managed the London business, and in 1833 his son, Mr. William T. Copeland, purchased the works, which have since become famous under the general name "Copeland."

The royal factories of Continental Europe no longer outrank the English. Copeland, Minton, and the Worcester factory equal, if they do not surpass, all European makers in the variety, beauty, and artistic character of their products. The best artists are employed, the utmost attention is paid to every department of the mechanical work, and the result attained, in potteries and in porcelain, renders English ceramic art in this century the highest art in all the ages.

Other potters at Stoke have been :

THOMAS MAYER (established before 1829);
HENRY DANIEL (established before 1826);
HUGH BOOTH (died 1789),
EPHRAIM, HUGH, and JOHN BOOTH (from 1789);
W. ADAMS (died 1829), and his sons;

THOMAS WOLFE (about 1776), in whose factory
silver lustre was first produced;
WOLFE & HAMILTON, the same works;
ZACHARIAH BOYLE (established before 1829);
JOHN ALDERSEA (before 1829)

FENTON.—Thomas Whieldon was a potter here (Little Fenton) in 1740. Josiah Wedgwood was his partner till 1759. They made black-glazed, agate or mixed-clay, tortoise-shell, melon, and some other wares. Whieldon was an instructor of potters. Josiah Spode, Aaron Wood, and several other potters were his apprentices. John Barker and Robert Garner, two of his apprentices, established a pottery here. William Greatbach, another apprentice, was afterward celebrated for teapots with the story of the Prodigal Son on them in black print, and was so good a potter that Wedgwood engaged him for life at high wages, and employed him till his death.

Ralph Bourne, William Baker, William Bacchus, and Felix Pratt, were potters at Fenton.

LANE DELPHI.—Among the several potteries here, the most important was established before 1800 by Miles Mason, whose name appears on early



248. Covered Cup, by Whieldon.

pieces of ware. Charles James Mason perfected and patented, in 1813, the "iron-stone china" made by using with the clay the pulverized slag or scoria of iron stones. The firm of Mason & Co., under this and other firm names, did an extensive business in this and other wares, including soft-paste porcelain, and their products are frequent in America. They made large and small vases of iron-stone ware with relief ornaments, decorated in colors, among which a remarkably brilliant dark blue with iron-red is conspicuous. Some of these are elaborately ornamented. A conspicuous mark includes the words "Fenton Stone Works C. J. M. & Co., Granite China Staffordshire Potteries."

Other potters here were Joseph Myatt, Elkin Knight & Co., Samuel Spode, William Edwards, W. Matthews, and a Mr. Phillips. Thomas Heath was an early potter here, working in 1710.

LONGTON, OR LANE END.—The most important factory here was established in 1762 by John Turner. He made cane-colored stone-ware, in various forms, sometimes of great beauty. A punch-bowl is described as made by him which held twenty-two gallons. He imitated Wedgwood's jasper-wares with some success. His products of this kind are remarkable for beauty and finish. To him, among other claimants, is assigned a class of cream-ware found in Holland,



249. Queen's-ware.

much of which was decorated with odd paintings, sometimes accompanied by Dutch inscriptions. The Prodigal Son, the Crucifixion, portraits of the family of Orange with orange-trees, are all very rudely painted. Turner died 1786, and was succeeded by his sons William and John, who continued the works in all varieties of ware. They patented a stone-ware in 1800, on which is found *Turner's Patent*.

John Aynsley, established at Lane End before 1800, made melon and cream wares. His white mugs with black prints are occasionally found, his name being sometimes on the border of the print. We have seen prints relating to Washington on wares which seem to be by him. These are described, in a list of prints relating to Washington, under LIVERPOOL.

William Bailey and W. Batkin are described as the "sole patentees of lusted pottery," doing a good business in 1823, and having been established since the beginning of the century. Their names occur on lusted wares.

Thomas and Joseph Johnson made soft-glazed white ware in the last

century, and were succeeded by Mayer and Newbold, who, about 1800, extended the works, and made excellent porcelain, well decorated. They marked *M & N*, and also *Mayr & Newbold*.

J. Harley's name is found on pottery of Lane End.

Chetham & Wooley, about 1795, invented a paste called "pearl-ware," which was afterward used by many of the best manufacturers. Wedgwood had previously given the name to a ware of his invention.

There were many other potters in Staffordshire, whose marks will be found in the Table, or their names in the Alphabetical List of English Potters hereafter given.

LIVERPOOL was the seat of potteries in the early part of the eighteenth century. From 1716 to 1770 there were several makers: Alderman Thomas Shaw, James Drinkwater, Richard Chaffers, John Pennington, Philip Christian, Zachariah Barnes, John Sadler, Guy Green, W. Reid & Co., and Richard Abbey.

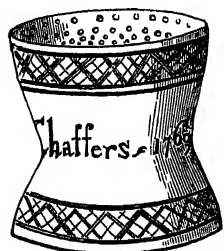
Thomas Shaw was the principal manufacturer as early as 1716. The earliest dated piece is attributed to Shaw, a plaque of Delft ware with a rude landscape view, over which is an inscription: "*A west prospect of great Crosby, 1716.*" This measures two feet seven by one foot eight inches. Over a pew in the old church at Crosby is another plaque, twenty-two inches by sixteen, on which are painted in blue the arms of the Merchant Taylors' Company of London and the inscription, "*This seat was erected by John Harrison and Henry Harrison of Liverpoole, 1722.*" Blue-and-white Delft wares were the chief products of the Liverpool potters at this time. It is probable that a considerable portion of such wares now found in this country, especially in New England, are of their fabric.

Richard Chaffers was established as a potter in 1752, and made blue-and-white wares, but soon entered into competition with the Staffordshire potters in other classes of ware. The books tell of a pepper-box in pottery made by him, with his name on it, and exported to America so largely as to give rise to an expression, "hot as Dick's pepper-box," which we are assured was a "household word" in America. We have never met with



250. Interior of Bowl, by Shaw: Liverpool pottery.

the expression in American literature or folk-lore, and the Chaffers pepper-box is, in fact, a sand-box for sprinkling sand on writing.



251. Sand-box, by Chaffers. (Liverpool.)

To Mr. Chaffers England was indebted for the discovery of the Cornish clays, which have contributed vastly to the wealth of England in the pottery business. He was persuaded that kaolinic clays could be found in Cornwall; and having obtained permission from land-owners, about 1755, expended considerable money in borings in search of it with no success, until in the moment of giving it up, when he had paid off his men and was riding homeward in despair, a hail from a mountain-side recalled him to learn that one of his exploring-parties had made the desired discovery. He applied these clays to the production of improved porcelain wares, and in later times they took the place of the old frit bodies in English soft-paste porcelains. Cookworthy utilized them for hard-paste porcelain at Plymouth, as did Champion at Bristol, and the entire pottery art in England felt in time the influence of their discovery.

Chaffers made a great deal of good pottery. Wedgwood regarded him as a successful rival in colors; and on seeing some of his work, said, "Mr. Chaffers beats us all in his colors, and with his knowledge he can make colors for two guineas which I cannot produce so good for five." Mr. Chaffers died in 1765, and his works were soon discontinued. The sand-boxes dated 1769 must have been made by another Chaffers, of whom we have no account.

John Sadler, son of a printer, and himself an engraver, was a potter. It has been claimed for him that he invented printing on pottery and porcelain—an invention which revolutionized the art by increasing the scope and cheapening the cost of popular decoration. This art, when it became public, was adopted in all the commercial potteries of Europe, and has in our own time been so improved by printing in colors that wonderfully beautiful imitations of painting are made cheaply. Mr. Mayer says that Sadler saw children playing with broken pottery, which they ornamented by sticking on it prints which he had given them, and thus took the idea which led to the invention, which, after some time, he perfected. The process was very simple. It consisted only in printing the picture from a copperplate, and laying the paper on the surface of the piece where, being pressed, it leaves the ink. Guy Green, a printer who had succeeded Sadler's father, was his only confidant and partner in his experiments and success. They proposed to take out a patent, and the papers, with ac-

companying affidavits, are extant, dated in 1756, at which date they had been for some time working the new business. Sadler and Green make oath August 2d, 1756, that on the 27th of July they did alone, without help, in six hours print upward of one thousand two hundred tiles of different patterns, which were more in number, and better done, than one hundred skilful pot-painters could have painted in that time.

The same art was practised at Battersea in 1753, where was a manufactory of enamels on copper. At this factory, Ravenet, an engraver of note, was employed, and Robert Hancock, also an engraver. Mr. R. W. Binns, in his "Century of Potting at Worcester," cites examples of prints on Battersea enamel dated 1753 and 1754. Horace Walpole wrote to a friend in 1755, speaking of "the new manufacture of Battersea, which is done from copper plates." A French pamphlet, by Rouquet, an English translation of which appeared in 1755, is cited by Mr. Binns as mentioning the art of printing on enamels in England. Robert Hancock went to Worcester, and there became celebrated as an engraver of porcelain decorations. The art was introduced there, the earliest known specimens being mugs and other articles, with a portrait of the King of Prussia, dated 1757, signed with Hancock's mark. Berlin has claimed this invention, as has been mentioned, but it is not known that any ware was printed at Berlin, although the idea was conceived there.

The evidence of priority thus far collected is in favor of Sadler to this extent—that he printed wares successfully in 1756, and this is the first known instance of printing on pottery. His application for a patent, and the preparation of the accompanying affidavits, indicate an honest belief in his claims as an inventor, and a previous practice of the art, and are inconsistent with any knowledge of the fact that another had invented and was actually using the art in Battersea. It is quite probable that Sadler was the printer of the Battersea enamels, and the instructor of Hancock. That he printed on enamel is evidenced by a portrait of the King of Prussia, printed on enamelled copper, signed *J. Sadler, Liverp^l. Enam^l*. described by Mr. Mayer.

He decided not to take out a patent; but the partners, Sadler and Green, preserved their art a secret, and did an extensive business in printing wares for other potters. Wedgwood sent his queen's-ware to Liverpool to be printed by Sadler, and returned to be baked.

John Pennington, from 1760-'90, made punch-bowls and other wares, using a remarkably fine blue color, for the making of which he possessed the secret.

Philip Christian made all kinds of ware, commencing some time be-

fore 1765. Zachariah Barnes made chiefly tiles, in the latter half of the last century. W. Reid & Co. made blue-and-white wares, commencing before 1756.

About 1790, Richard Abbey established a pottery, at which he made mugs and other wares, printed with arms, ships, and various mottoes. In 1796, Messrs. Worthington & Co. took this pottery, and called it the *HERCULANEUM POTTERY*, under which name it continued till 1833. They made blue printed wares and queen's-ware decorated with prints and with paintings, both of which came in considerable quantities to America. Plates with English flowers, the names on the back, are good specimens.

Large numbers of mugs, jugs, bowls, and other articles of cream-colored ware were made at the Liverpool potteries, with transfer prints, and with inscriptions, songs, ditties, and mottoes. It is not easy to assign many of these with certainty, when unmarked, as the same class of wares was made in many other potteries. Where accompanied with copper-lustre decorations, they are quite likely to be of Newcastle, Sunderland, or some one of the potteries in that neighborhood. On an old Liverpool bowl appears :

John Undy of Luxillion
his tin was so fine
it glidered this punch bowl
and made it to shine.
Pray fill it with punch,
let the tinnors fill round,
they never will budge
till the bottom they sound. 1731.

On a beer-mug is this puzzle :

more	beer	score	clerk
for	my	the	his
do	trust	pay	sent
I	I	must	has
shall	if	you	maltster
what	for	and	the

Many prints on Liverpool mugs and jugs, or pitchers, have reference to political and other events, which make them historically interesting. They were frequently decorated to order, and bear inscriptions indicating the sentiments and character of the persons so ordering them. A correspondent of *Notes and Queries* thus describes one of this kind, which was made about 1800, and is assigned to Liverpool (though he thinks it Leeds):

"Under a trophy of arms are figures of John Bull and Napoleon. John Bull is in the act of striking his opponent with his right fist a severe blow on the nose; the nether end of Buonaparte is at the same time in collision with sturdy John's left boot. Inscription: 'See here John Bull drubbing Buonaparte!' On either side of this picture we have,

'What! to conquer all England how dares he pretend,
Thus ambitious but vain undertaker,
When he knows to his cost, that where Britons defend,
He's unable to conquer one ACRE?'

'If your beggarly soldiers come among us, they'll soon have enough of it; and, damn me, if any ten of you shall have my person or property!—So be off!'

'Damn ye! you black-hearted treacherous Corsican! if you were not such a little bit of a fellow, in spite of your large cocked hat I'd crack your skull in an instant with my fist.'

Another jug is described, cream color with a large print on each side. One picture has above it "The Triumph of Liberty;" underneath is the title, "The first Attack of the Bastille, taken by Storm after a Conflict of three hours by the Citizens of Paris, July 14, 1793." The other picture is entitled "Storming of the second Draw-bridge of the Bastille." On the front of the jug is the following, in ornamental letters: "D. B., humbly presented by J. H. 1793."

Many of the Herculaneum cream-colored wares have prints relating to America. These have no special value as ceramic specimens, but are curious and interesting. They are in general of ungainly shapes, and the prints are poor specimens of the art. They seldom bear the factory mark, but it appears occasionally impressed on the bottom, and sometimes printed in large black

letters, HERCULANEUM POTTERY between the decorating prints on the front of a pitcher



252. Portrait, from Liverpool pitcher.

An extensive series of these prints refer to the life and death of Washington, and pitchers bearing them are commonly spoken of as "Washington pitchers." They are not rare, and are found in great variety, the same Washington print often appearing on different specimens, with different accompanying prints, and on pitchers of various sizes. The following list of Washington prints occurring on Herculaneum potteries, in our own and other collections, will show the variety of these decorations:

1. Head of Washington in oval, from Stuart's portrait (Ill. 252). This is found on pitchers usually of small size, and frequently on an oval plaque, which has the swell of the side of a pitcher, as if cut out from one. An old tradition ascribes these to an unknown American who ordered a specific number in Liverpool.

2. An oval print, including a monument on which is a medallion head of Washington and inscription. A drooping eagle in the foreground. Above, "WASHINGTON IN GLORY;" below, "AMERICA IN TEARS" (Ill. 253). On pitchers of three sizes.

3. The same design, more coarsely engraved, and the words, "WASHINGTON IN GLORY," "AMERICA IN TEARS," are engraved within the line of the oval. On pitchers of two sizes.

4. Several prints on a large pitcher: under the handle, Fame in clouds. On the front, the American eagle and shield, and inscription: "Peace, Commerce, and honest Friendship with all Nations, Entangling Alliances with none. JEFFERSON."



253. Washington Pitcher: Liverpool. (T.-P. Coll.)

Under this, "Anno Domini 1804." On the side, a medallion, surrounded with wreaths, including a monument under a willow-tree. On the monument, "G. W. Sacred to the memory of (G. Washington, who emancipated America from slavery, and founded a republic upon such just and equitable principles that it" (remainder illegible). Under the monument, portraits of Samuel Adams on left, and John Hancock on right, the letters S. A. and J. H. under them. Under these a beehive and cornucopia. Around the medallion, "The Memory of Washington and the Proscribed PATRIOTS of AMERICA. Liberty, Virtue, Peace, Justice, and Equity to ALL MANKIND."

Under this, "Columbia's Sons inspired by Freedom's Flame, Live in the Annals of immortal Fame."

5. A large print, including a small portrait-head; Justice and Liberty on each side. Victory offers the helm. A cherub above holds a wreath enclosing "Washington." Fifteen stars and fifteen names of States enclose the print. On a large pitcher (Ill. 254).



254 Washington Pitcher: Liverpool (T-P Coll.)

6. Oval print, entitled APOTHEOSIS. Time lifting Washington from a tomb; an angel, holding his hand, points up to rays of glory. Liberty and America seated by the tomb, on which is "Sacred to the memory of Washington ob. 17 Dec. A.D. 1799." A woman, with other subjects, in the distance. On pitchers of two sizes (Ill. 255).

7. Oval print: Washington and Liberty standing by the map of the United States. On a large pitcher. This is one of the best prints in the series.

8. The same subject, poorly engraved, and smaller. On a smaller pitcher. The work on this specimen resembles the mugs, etc., made by J. Aynsley, of Lane End, and it is probably by him.

9. Portrait of Washington: on his right stands America, saying, "Deafness to the ear that will patiently hear, and dumbness to the tongue that will utter a calumny against the immortal Washington." On his left, Liberty, saying, "My favorite Son." Below, "Long Live the President of the United States." On a large pitcher.

10. An oval, scalloped at sides to admit names of thirteen States. Landscape; a church at right, water and ships at left. In the foreground, a large monument; on the pedestal, a medallion portrait of Washington, and legend, "FIRST IN WAR, FIRST IN PEACE, FIRST IN FAME, FIRST IN VICTORY." Fame stands at right, a naval officer and a citizen at left. In front a boy reclines on the American flag, under which a cannon, sword, hatchet, etc. On a large pitcher. The style of this engraving and the ware differ from all the others. It is more likely to be the work of a Staffordshire potter.

11. Several prints: (1) Washington, mounted, on a battle-field; under it, "His

Excellency General George Washington, Marshal of France, and Commander-in-chief of all the North American Continental forces;" (2) Franklin, the fur-cap portrait; (3) a print, with surrounding legend, "By virtue and valor we have freed our country," etc.; (4) American eagle and shield. These prints surround a heavy cream-colored bowl, in the museum of the Connecticut Historical Society, probably by Aynsley, of Lane End.

12. A design similar to Nos. 7 and 8, with reference-numbers on the figures, and outside the oval the names *Washington, Fame, Liberty, Franklin*, etc. This occurs in the bottom of a large bowl, the outside of which has several prints, one of INKLE AND YARICO. It resembles the work of Aynsley, but may be of another Staffordshire potter.

A variety of prints, verses, mottoes, and emblems accompany these Washington prints. On one we have, "May America never want artillery to defend her rights;" on another, "Success to the infant navy of America;" on another, "A man without example, a patriot without reproach." On one pitcher the reverse is a wreath, with masonic emblems, enclosing the verses:

"We help the poor in time of need,
The naked cloath the Hungry feed;
'Tis our foundation stone.
We build upon the noblest plan,
Where Friendship rivets man to man,
And makes us all as one."

On another is a wretched engraving, entitled "An Emblem of America." A female figure, standing, holds in one hand the flag. Before her stand two Indians whom she points to a portrait-gallery behind her, where hang small ovals of heads labelled COLUMBUS, AMERIC—(Vesputius?) RALEIGH, WASHINGTON, ADAMS. On another, two prints, one of timber-cutting, the other of ship-building, are separated by verses beginning

"Our mountains are covered with imperial oak,"

and ending,

"For ne'er shall the sons of Columbia be slaves,
While the earth bears a plant or the sea rolls its waves."

On another are the verses:

"As he tills your rich globe the old peasant shall tell,
While his bosom with Liberty glows,
How your Warren expired, how Montgomery fell,
And how Washington humbled your foes."

On another is a schooner, and the lines (one word illegible),

"Commerce * * * and peace
All nations' joys increase."

Herculeanum pitchers, mugs, bowls, plates, etc., have many other prints relating to America. The reverse prints described on the Washington pitchers are sometimes combined on other pitchers.

One has the two prints of timber-cutting and ship-building, with verses on one side, a large American eagle and shield on the other side, and in front a smaller eagle, with the words HERCULEANUM POTTERY, LIVERPOOL. One has a print of the death of Montgomery; another has the death of Warren; another Liberty seated, and the motto "May Columbia flourish." Ships with the American flag are common on pitchers and plates, sometimes in black print, often painted in colors over the print.

A small pitcher, with two portraits of Colonel Tarlton, one mounted, the other standing, was probably made at the time of that officer's great popularity in Liverpool after the American war, when he was enthusiastically elected to Parliament without expense.

A mug has a portrait, and on a ribbon label THE HONOURABLE JOHN HANCOCK (Ill. 256).

American ship-masters trading to Liverpool, and other Americans, had pitchers made to order with prints of local American interest. Such was the origin of a pitcher with a print entitled "The gallant defence of Stonington August 9 1814," representing that famous event, when the inhabitants with one gun successfully resisted an attack and bombardment by a British force of several vessels, sinking one and driving off the others. Under the print is, "Stonington is free whilst her heroes have one gun left." On the other side is a ship, under which is, "United States frigate Guerriere Com. Macdonough bound to Russia July 1818." The pitcher is one of a small number ordered by a citizen of Stonington who went to Russia on public service in the *Guerriere*, and probably himself made the drawing of Stonington and the battle, which was copied by the Liverpool engraver. A pitcher has a ship on one side, and on the other a ribbon wreath, with names of sixteen States, enclosing verses, commencing,



255. Washington Pitcher: Liverpool. (T.-P. Coll.)

"Oh Liberty, thou goddess
Heavenly bright,
Profuse of bliss
And pregnant with delight," etc.

Pitchers with masonic emblems, accompanied by American mottoes and designs, are quite common. Views of American towns and scenery,



256. Liverpool Mug: John Hancock.
(A. T. S. Coll.)

on pitchers made to order by or for residents, are common, and such specimens are frequent, especially in seaport towns, where ship-masters trading to Liverpool resided. Examples like that of the Stonington pitcher will always be historically interesting. There are many other American subjects on *Herculaneum* potteries.

The earliest mark of this factory was *HERCULANEUM*, printed in blue, or impressed; but down to 1822 many works escaped marking. After that several marks were used, including the name *HERCULANEUM*, and sometimes the bird which is the crest of the arms of Liver-

pool. The pieces with prints relating to America are of various periods—from the foundation of the factory in 1796 to 1820, and possibly later.

JACKFIELD, in Shropshire, was a famous site for the making of black glazed wares, as early as 1713 and down to 1780. Many an old Jackfield teapot, made of red pottery, with a rich black glaze, decorated with reliefs or with painted flowers outside of the glaze, still remains in one or another American family, where its look of antiquity makes it prized. This pottery was removed to Coalport. John Thursfield, at *BENTHAL*, made similar ware.

The most important factory in Shropshire was at *CAUGHLEY*, established about 1751. In 1772, Thomas Turner began work, and built a factory, at which the Caughley, or Salopian, wares of various kinds were afterward produced. His potteries and porcelains were unsurpassed in England, and for the decorations he employed the best artists. In 1780, he introduced the willow pattern, which has probably been the most popular design ever produced for ceramic decoration, and is therefore worth studying, to ascertain, if one can, why such a nondescript pattern, neither Oriental nor Occidental, neither Italian, French, German, nor English, but simply a queer combination of lines and designs, hit the taste of the edu-

cated as well as the uneducated classes, and lasted for sixty years with unexampled popularity. He also introduced the "blue-dragon pattern," which consisted of a large dragon in blue, sometimes one, sometimes two or three dragons, disposed on a dish, plate, or other piece, and was widely popular. He is said to have made the first full table service of printed ware in England. He sold white porcelain (which was always soft paste) to be decorated at other factories. Messrs. Chamberlain, of Worcester, were large purchasers. Birds, insects, fruit, and profuse gilding of borders characterized his decorations. The most frequent marks were the letter S, for Salopian, and a crescent moon. The latter mark was also used at Worcester, and it is not safe to depend on a common idea that the Worcester crescent was only outlined, while the Salopian was filled up. Other marks were numerous, and are given in their place in the Table. Turner died in 1799, and the factory was soon incorporated with Coalport.



257. Turner's Caughley Porcelain: the willow pattern.

At COALPORT, or COLEBROOK-DALE, Mr. John Rose, who had removed hither the Jackfield works about 1780, carried on the manufacture of porcelain. In 1799, he bought the Caughley works, and made white wares there, running both factories, till, in 1814, he removed the Caughley business to Coalport. In 1820, he purchased the SWANSEA and the NANTGARROW factories, and incorporated them with the Coalport. Billingsley, a celebrated painter of roses and other flowers, one of the owners of the Nantgarrow works, was employed and worked at Coalport till his death, in 1828. About 1821, was introduced a ground of maroon color which was greatly admired. It was used sometimes in bands around cups and saucers, and Billingsley painted flowers on it.

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Good counterfeits of Dresden, Chelsea, Sèvres, and other factories were produced, on which the marks were also counterfeited. The ground-colors, especially the rose of Sèvres, were admirably produced. The

works of Billingsley here, and at other factories where he was employed, are much sought by collectors. Mr. Haslem, in his history, "The Old Derby China Factory; the Workmen, and their Productions," gives all the known particulars of William Billingsley's life. He was apprenticed at Derby, in 1774, for five years, and worked there twenty years. In 1796, he went to Pinxton for a short time. In 1801, he was painting china on his own account at Mansfield; after that at Torksea; and about 1808 he seems to have gone into hiding, being in trouble of some sort. He was painting at Worcester probably from 1808 to 1813. From 1815 to 1820 he and his son-in-law, Walker, were carrying on the works at Nantgarrow and Swansea, in Wales; and in 1820 they went to Coalport, where Billingsley died, in 1828, a man of seventy. It will thus be seen that his work occurs on the products of several factories. We have seen a Coalport cup and saucer, with a counterfeit Dresden mark, to which is added a B. The decorations are in flowers and ribbons, probably by Billingsley.

Small sprig patterns, known as the "worm sprig" and the "Tournay sprig," are frequent on Coalport porcelains. The Caughley willow and dragon patterns were also used. Besides these no characteristic styles are known. Some of the work is beautiful porcelain, but it is not regarded as specially important, and pieces are easily procured at low prices.

In 1820, John Rose, the proprietor of the Coalport works, introduced a new paste called "Improved Feltspar Porcelain," and this name is stamped on the products with J. Rose & Co., J. R. & Co., and other variations. The factory mark on tea-services is usually on only one piece, most frequently the sugar-bowl. This is also a common characteristic of tea-services from other factories.

WORCESTER.—Mr. R. W. Binns has given, in his "Century of Potting at Worcester," a complete history of the important factories here.

Dr. John Wall, a physician, founded the Worcester porcelain company for soft-paste porcelain in 1751. Dr. Wall was greatly interested in the subject, was a chemist fond of experiment, and an inventor of pastes. He exerted himself, backed probably by the influence of the

clergy of the cathedral, and secured the formation of a company, among whom were Rev. Thomas Vernon, Richard Holdship, and others. In 1772,



258. Worcester Vase. Height 20 inches. (Huth Coll.)

this company sold out, and the property was purchased by Rev. Mr. Vernon for a new company, which consisted of Dr. John Wall, William Davis, senior, William Davis, junior, Rev. Thomas Vernon, Robert Hancock, the engraver, and Richard Cook. Hancock remained in the works till 1774. In 1783, they were sold to Joseph and John Flight. In 1793, Martin Barr was taken in, and the firm name was *Flight & Barr*. In 1807, another Mr. Barr coming in, it was *Barr, Flight, & Barr*.

In 1783, on the sale to the Flights, Robert and Humphrey Chamberlain, who has been employed, left, and established a rival factory.

In 1840, the two were united under the firm of *Chamberlain & Co.* In 1852, Messrs. *Kerr & Binns* became owners; and in 1863 a joint-stock company, *The Worcester Porcelain Company*, was organized, which now produces work of world-wide reputation.

The early porcelain of Worcester was, according to Mr. Binns, of what is called a "frit" body. He thinks that although Dr. Wall's recipe is unknown, it was about this: Sand, 120 parts; gypsum, 7; soda, 7; alum, 7; salt, 14; nitre, 40. This was fritted together in bricks. (To frit is to melt into a mass which is afterward broken and pulverized.) To 75 parts of the frit were added 15 of whiting and 10 of pipe-clay. This composed the body. The glaze contained 38 parts of red-lead, 27 of sand, 11 of powdered flint, 15 of potash, 9 of soda. The ware thus made has a greenish tinge, the ordinary steatite body being creamy and not so dense.



259. Teapot: Worcester porcelain.

The earliest Worcester decorations were blue, like the Chinese, sometimes under the glaze, sometimes enamelled on the glaze. Robert Hancock, who had been at Battersea, seems to have introduced printing on Worcester porcelain as early as 1757. The earliest dated specimens are mugs and cups and saucers, having a portrait of the King of Prussia, with the signature of Hancock, and the date 1757 (Ill. 260). A curious confusion arose at the time, and is perpetuated, of the work of Hancock with that of Richard Holdship and Josiah Holdship, his brother.

Richard Holdship was one of the founders of the works with Dr. Wall. His brother Josiah was concerned with him in the ownership of property, but nowhere appears in connection with the factory business.

Richard was business manager of the works, and appears to have become familiar with the art of transfer printing, as he subsequently offered his services at Derby in that work. Some of the early Worcester prints are signed with a combination of two marks, a monogram of R. H. and an anchor. The anchor has apparent reference to the name, Holdship, while the letters are the initials of the engraver, Robert Hancock. There is evidence that Hancock had engraved prints for transfer to Battersea enamels, but we have no knowledge that Hancock was acquainted with the



260. Jug: early Worcester print.

process of transferring the engravings to the enamels. It is probable, therefore, that at Worcester, the two, Hancock and Holdship, worked together on this department of the decoration, one doing the engraving, the other the transferring, or both working on the transfer, and the work was therefore signed with the marks of the two. How far Josiah Holdship was interested in this printing we have no means of knowing.

In the *Gentleman's Magazine* for December, 1757, appeared a poem attributing to Josiah Holdship the new invention of printing on porcelain. This reappeared in the *Worcester Journal*, January, 1758, and (as Mr. Binns states) with some alterations. Perhaps the author had himself made the changes, and, having learned that he was mistaken in addressing the compliments to Holdship, added an "impromptu," which followed the poem when it appeared in the *Worcester Journal*, in these words:

"Hancock, my friend, don't grieve, tho' Holdship has the praise;
'Tis yours to execute, 'tis his to wear the bays."

Hancock's Worcester print of the King of Prussia differs from Sadler's at Liverpool. The Worcester print represents the king in armor, the Liverpool in court costume.

After 1757, Worcester prints were in considerable variety, and, as at Liverpool, they were occasionally painted over with color. Among the prints are George II., George III., Pitt (Earl of Chatham), ruins, Chinese subjects, swans, haymakers, various masonic designs.

Bat-printing was introduced somewhat later. This consisted in using oil instead of ink, and taking the oil print on a bat of prepared glue, with which it was transferred to the porcelain. The oil lines thus laid on the

porcelain were dusted with powdered color. The engravings for bat-prints were generally in stipple work, and the difference is easily recognized. The designs of the best artists were sometimes used for these.

Worcester white porcelain was bought and decorated by artists, who made it their business to decorate and sell pottery and porcelain. Specimens of artistic work are known by John Donaldson; and one Giles, of Kentish Town, advertised to supply Worcester porcelain painted in any pattern.

Tokens were issued for two shillings, one shilling, and sixpence, with the letters *W. P. C.* on one side; and on the other, "I promise to pay to the bearer on demand 2*s.* W. Davis, at the China factory."

The early porcelain of Worcester has a cold and coarse look; the glaze is not white, but gray; and the ware has no beauty. Later, the wares were whiter, and the glaze became very pure. Color decorations became very fine. A rich dark blue was used freely. Brilliant colors in birds, flowers, and other paintings appeared. "Exotic birds" in bright plumage were common, resembling no known birds, but looking pretty enough on porcelains. From 1768 to 1780, *Sèvres* styles were used. When the *Flights* took the factory, they began with patterns that were very simple, a few flowers or sprigs, and a little gilding. Fluted cups were liked. About 1790, a style which Mr. Binns calls "*Worcester style*" was in vogue. Rich patterns in gold, copied from architectural ornaments then in favor, made elaborate services gorgeous with gilding. The *Japan style* succeeded this, and was popular in various English factories. All England abounded in wretched imitations of Oriental wares. After this a simple classic style of borders came into vogue at Worcester with plain bands of color. Vases had embossing, well-modelled handles and knobs, and rows of white beads. The colors were nearly all that are known—shades of blue from dark to light, maroon, pink, salmon, greens, and ivory. The ivory ground was used for flies and flowers. Of the artists, *Astles* painted flowers; *Davis*, exotic birds; *Webster*, landscapes and flowers; *Barker*, shells; *Brewer*, landscapes; *Billingsley*, flowers; *Baxter*,



261. Jug. (Worcester.)

subjects on plaques. The styles of Worcester were more brilliant than tasteful, and the patterns in general were stiff and devoid of grace.

Many noted services, made for royal orders, were superb in color and gilding, but not pleasing to the modern educated eye. Oriental pattern work was hideous alike to Oriental and Occidental good taste. Nevertheless, the popularity of these wares must be accepted as an important and trustworthy measure of English taste in the period of their manufacture.

The CHAMBERLAINS were at the same time producing similar work, and executing royal orders. Lord Nelson and Lady Hamilton visited their factory in 1802, and gave an order for a full service. The breakfast service only was completed before Nelson's death. Another service was made for the Duke of Cumberland in 1806, and a celebrated service for the Prince Regent in 1811. All these and the general products of the Chamberlains were as brilliant, in as poor taste, as those of the other factory, though their porcelain was lighter and more translucent than the other.



262 Worcester Teapot and Stand.

Thomas Grainger founded a porcelain factory in Worcester in 1800, which has continued under various firm names, some of which were used as marks—Grainger & Wood to 1812; Grainger, Lee, & Co. after 1812; George Grainger, Royal China Works, Worcester, after 1839; G. Grainger & Co. at present.

ROCKINGHAM.—Various kinds of pottery were made at ROCKINGHAM from about 1757. It was celebrated for brown, chocolate-colored, and mottled services, known as Rockingham ware. The teapots, chocolate-colored of various shades, white inside, were very popular. They were sometimes ornamented and gilt in Chinese and other designs. The “Cadogan” was a teapot with tight top which filled from the bottom, ornamented with raised flowers. In 1820, soft-paste porcelain was made. The marks on pottery are impressed, ROCKINGHAM, BRAMELD, MORTLOCK, MORTLOCK’S CADOGAN, and sometimes a griffin, the Rockingham crest.

NEWCASTLE and SUNDERLAND, near together, were old seats of potteries. White wares were made by a Mr. Warburton before 1750, and numerous other potters were established here and at Southwick, St. Anthony’s, and, later, at Stockton. The wares made in this neighborhood

were of similar class, potteries for common use, often decorated with purple and pink metallic lustre, transfer prints, and coarse paintings. Verses and mottoes abound on specimens. Raised figures are common. At St. Anthony's white wares in basket and other patterns were produced. The Newcastle mug is notable, in which a frog was so placed that one drinking saw him emerge as the liquor became low. The principal names which occur on pottery of this district, impressed or printed, are:

PHILLIPS & Co., Sunderland.
 PHILLIPS & Co., Sunderland Pottery
 J. PHILLIPS & Co, Hylton Pottery
 DAWSON.
 SCOTT.
 DIXON, AUSTIN, & Co., Sunderland.
 DIXON, AUSTIN, & Co.
 MOORE & Co.

NEWCASTLE POTTERY.
 T. SEWELL & DONKIN.
 SEWELLS & DONKIN
 SEWELLS & Co.
 FELLS, Newcastle.
 FELL.
 FELL & Co. (over an anchor).
 T. FELL & Co.

DERBYSHIRE.—We have already spoken of the early wares of Heath, made at COCK-PIT HILL. In 1770, at WIRKSWORTH, a potter named Gill made wares like Nottingham ware, and afterward soft-paste porcelain, decorated with poorly painted flowers and shells. No mark is known.

Belper & Denby, Bourne's Potteries Derby shire, is a stamped mark found on stone-ware bottles, in the form of well-known statesmen of the time of William IV. The Denby pottery makes other wares. There were various other unimportant potteries in Derbyshire.

The DERBY porcelain factory was established in 1751, by William Duesbury. The work was not remarkable until, in 1769, Duesbury purchased the Chelsea factory. He managed the two works separately till 1784, when he closed the Chelsea factory, transferring the material to Derby. In 1788, he died, and William Duesbury, his son, succeeded him, having a partner, Michael Kean, who, after the death of the younger Duesbury, managed the works for his widow till about 1815, when they were sold to Robert Bloor. They



268. Chelsea-Derby Cup and Saucer. (Museum of Practical Geology.)

remained the property of Bloor, and were managed by or for him till his death, in 1849, when they passed to Locker & Co., who worked them till 1859, when Stevenson & Hancock took them; and on Mr. Stevenson's death, in 1866, Mr. Hancock became sole proprietor. A pamphlet, "The

Pottery and Porcelain of Derbyshire," by A. Wallis and William Beunrose, junior, contains particulars of the history; and a large volume by John Haslem, "The Old Derby China Factory; the Workmen, and their Productions," abounds in facts relating to the works and those employing and employed in them.

The porcelain of Derby was a pure white soft paste, the decorations tasteful and sometimes beautiful, in great variety. The vases which had



264. Crown-Derby Cup and Saucer.

been made at Chelsea were largely reproduced, as well as the figures and groups, while new forms were added. A favorite pattern for a vase was the Greek krater form, wide open at top (Ill. 265). A deep blue, used as a ground, and decorated with flowers, landscapes, and figures in open medallions, with rich gilding, often in scale patterns, was a characteristic style. Billingsley, the flower-painter, worked at Derby as an apprentice and decorator for

about twenty years. Numerous other artists were employed for flowers, landscapes, birds, insects, Oriental subjects, and figures. Ribbed or fluted wares, with gilt edges decorated with flowers, were made in the second period, after the purchase and before the closing of the Chelsea factory.

This is known as the Chelsea-Derby period, down to 1773; and the Crown-Derby period is that immediately following it. The great variety of patterns used at Derby renders it wholly impossible to give any characteristics which would be of practical use to the collector. Mr. Binns, of Worcester, has in his possession one of the old Derby pattern-books, and Mr. Haslem has in his volume reproduced many of these in color, which may be studied with advantage.

The marks were various, in the successive periods. The oldest period is indicated by a letter *D* or *Derby*, and after this follows the *D* with an anchor of the Chelsea-Derby period. Next to this, following a royal visit to the factory, in 1773, the mark with a crown was adopted, of which the earliest examples are in blue, puce, or gold, and the later in red. In earlier times the mark was made with some care; but in later work it is careless, the crown and letter being barely indicated by dashes of the brush-point.

The Derby porcelain of the highest class was always expensive.

Dr. Johnson visited the factory in 1777, and complained that it cost as much as silver. Like many other people, he had no appreciation of the truth that silver is valuable for what it will buy, and that art adds a hundred-fold to the value of silver itself. Dr. Johnson's complaint is well placed on record as an illustration of a common class of thinkers, who measure the value of beauty by mediums of exchange or weight in exchangeable metal. In contrast to this is the truth that money has no value except for its purchasing power. He who can command silver and gold, and knows its true value, uses it for his own good and happiness and the good and happiness of others. There is no greater and more common absurdity than is exhibited in the criticisms made on collectors. A lump of gold kept in a fire-proof safe is absolutely worthless. Large investments, accumulating income to be reinvested, are worth no more than waste-paper unless reserved for future uses in the way of getting good or doing good. The man who has money and knows its worth has right, and is sensible, in using it to purchase works of art, works of historical importance, pictures, sculpture, laces, pottery—whatever he please; and that critic is exceedingly foolish who imagines that his idea of what ought to be done with money is the only correct idea. Learned men like Dr. Johnson are often very poor judges of the value of money, and equally of the value of art. For many reasons an artistic piece of porcelain is worth more to keep than an unartistic piece of silver or gold, whatever be the weight of either.

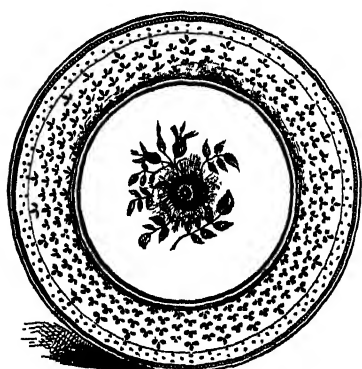
At PINXTON, in Derbyshire, John Coke, with William Billingsley, the flower painter, established a factory for soft-paste porcelain about 1793. Billingsley managed the making of the paste, which was a good translucent body, and was largely decorated with the Chantilly sprig pattern, copied from the French—a small blue flower edged with gold. Billingsley left about 1800, and Coke carried on the works, succeeded by his foreman, Cutts. The factory was closed in 1812.

George Haynes established a pottery at SWANSEA about 1750, making ordinary wares. Towards 1800, he introduced a paste called "opaque china." In 1802, Lewis W. Dilwyn bought the works. W. W. Young



265. Crown-Derby Vase.

was afterward employed to decorate the opaque china. He painted birds, butterflies, shells, etc., with skill and taste. His work is valued by collectors.



266. Plate: Nantgarrow porcelain.

earthenwares was continued. The "Etruscan wares," pottery in Greek forms and styles, are among the best products of Swansea in the last century. A fine white salt-glazed stone-ware of superior beauty was made here, and is occasionally found with the mark *Cambrian Pottery*. Among other marks are *Cambrian*, *Opaque Porcelain*, SWANSEA, *Dilwyn & Co.*

In 1813, William Billingsley, the flower-painter, suddenly left Worcester, where he was employed, and with his son-in-law, Walker, started a porcelain factory at NANTGARROW, or NANTGARW, in Wales, where for a few years they made porcelain, which is occasionally marked with the name NANTGARW and the initials G. W., painted in red. The porcelain, when not marked, can be recognized by its great softness and granulated fracture, like loaf-sugar. Vases of beautiful form, plaques, and services, decorated with flowers and subjects, birds and insects, on tinted grounds, are prized by collectors. A frequent decoration was a centre sweetbrier rose, with a border covered with trefoils (Ill. 266). Mr. Rose bought the works about 1820, and transferred them, with Billingsley and Walker, to his establishment at Coalport.

Bow.—The first soft-paste porcelain factory in England was established at STRATFORD-LE-BOW, commonly known by the simple name Bow, about 1730; but nothing is known of its products till 1744, when Edward Heylin and Thomas Frye received a patent

His paintings of hawks and eagles are remarkably truthful. About 1813, Billingsley, who had started his works at Nantgarrow, was engaged by Dilwyn to superintend his establishment also, and from this time till 1817 a very fine soft-paste porcelain was produced, decorated with flowers, insects, natural-history and other subjects. The porcelain of Swansea is regarded as the finest English product made up to that time, and good examples are prized by collectors. After the close of the porcelain business, the making of



267. Bow Teapot: reliefs and flowers.
(T.-P. Coll.)

for making ware equal to imported china or porcelain. A punch-bowl in the British Museum has a document attached to it, which is signed T. Craft, 1790, and states :

This bowl was made at the Bow china manufactory about the year 1760, and painted there by Mr. Thomas Craft. My cipher is in the bottom; it is painted in what we used to call the old Japan taste, a taste at the time much esteemed by the then Duke of Argyle; there is nearly two pennyweight of gold, about fifteen shillings; I had it in hand at different times about three months; about two weeks' time was bestowed upon it; it could not have been manufactured, etc., for less than four pounds. There is not its similitude. I took it in a box to Kentish Town, and had it burnt there in Mr. Gyles's kiln; cost me three shillings. . . . The above manufactory was carried on many years under the firm of Messrs. Crowther & Weatherby, whose names were known almost over the world. They employed three hundred persons; about ninety painters (of whom I was one), and about two hundred turners, throwers, etc., were employed under one roof. The model of the buildings was taken from that at Canton, in China.

Mr. Weatherby died in 1762. Mr. Crowther went into bankruptcy in 1763, and there was a sale of the establishment and stock in 1764; but Crowther continued its management till 1775 or 1776, when Duesbury, of Derby, bought and closed it.

The Bow porcelain products are very unequal in quality, but some of them are not only among the first, but are also among the best, of English products. Services, vases, and candelabra, shell and rock work, salt-cellars, animals, and a variety of statuettes and groups, were made. The glaze used was thick and somewhat milky, a characteristic being that the glaze fills up the finer lines in reliefs. The decorations were generally in delicate colors, admirably combined for beautiful effect, without gaudiness, in birds, insects, hunting, and other subjects. The statuettes are sometimes very poor, sometimes admirably modelled; some have square holes in the back, indicating that they were intended as supports to candelabra or attachments to other articles. Scroll patterns for the pedestals of figures and groups are common to Bow as to Chelsea; but



268. Bow Candlestick: group, Autumn.

in the Bow, Mr. Chaffers says, the scrolls are more commonly painted blue or crimson, and on dresses the Bow flowers are generally yellow or crimson, with gold leaves.

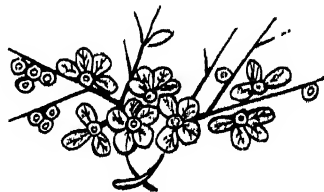
Embossed ware, decorated in blue with small Chinese subjects, weeping-willows, birds, and flowers, was largely produced. When Sadler invented transfer printing, Bow wares were sent to Liverpool and printed. Embossed wares in pure white were common. The most characteristic relief pattern of Bow porcelain is the hawthorn blossom (Ill. 270), which is found frequently embossed on pieces, usually more or less filled up with the glaze. Vases were frequently covered with flowers in relief work, and insects and flowers were painted on the flat surfaces.



269. Bow Cream-jug, with the Bee.
(Bandinell Coll.)

The paste varies in hardness. Cookworthy, of Plymouth, in a letter written 1745, says he had seen a person "who has discovered *China earth*. He had with him several samples of the China ware which, I think, were equal to the Asiatic. It was found on the back of Virginia." This American clay seems to have been offered to Heylin, the pat-

entee at Bow, who, in his application for a patent in 1744, says, "The material is an earth, the produce of the Cherokee nation in America, called by the natives *Unaker*." The specimens shown to Cookworthy were probably Heylin's experimental pieces, made with this American earth, and among the early products of Bow some specimens are hard paste, indicating the use of kaolinic clay. But the American supply was not kept up, and the subsequent porcelains were soft paste. They are usually heavy for their size, the paste thick and compact. A small pitcher, on the front of which is a bee in full relief, is one of the esteemed specimens of Bow porcelain.



270. Hawthorn Pattern: Bow decoration.

Thomas Frye, who was the artist of the early Bow fabrics, was a por-

trait-painter, born in Dublin in 1710. He came to London with Stoppe-laer, the Irish artist who painted the scenes and spoke for the puppets in the plays of which Dibdin wrote the songs and music. Frye was a successful painter, and also engraved portraits in mezzotint, which are remarkable for vigor and good drawing. His two daughters assisted him in painting porcelain, one of them, Mrs. Wilcox, afterward going into the employ of Wedgwood, where she was highly esteemed, until her death in 1776.

There is considerable doubt overhanging the classification and the marks of Bow porcelain. There was no regular factory mark used, and arrow-marks, bows, daggers, and other designs scratched or painted on specimens are numerous. It is better to rely on acquaintance with the ware than on the marks. Many of the statuettes were reproduced at Chelsea and Derby, and can only be identified by familiarity with the ware. More than one of the marks often occur on specimens. We have found a long scratched cross, a waving line, and various undescribed marks, which it would be of no use to the collector to reproduce. The impressed triangle, formerly assigned to Bow, is now regarded as a mark of Chelsea.

The Chelsea works were founded about 1745. The first proprietors were the Duke of Cumberland and Sir Everard Fawkener, and the manager Nicholas Sprimont, who, in 1755, became proprietor. In 1769, Duesbury, of Derby, bought the Chelsea factory, and continued its management in connection with Derby till 1784, when he removed the materials to Derby. The best period of Chelsea was from 1750 to 1765. The story is told that in those times the London dealers stood in crowds to purchase pieces at the times for taking them out of the furnaces.

The products were of all classes—vases, services, statuettes, and groups, many of very great beauty and excellence; candelabra, with foliage and groups of figures; animals under trees, and other objects. The paintings were also of great variety—birds, flowers, insects, and subjects. From 1760 to 1763 the colored grounds of Sèvres were repeated with success, the turquoise, deep blue, crimson, apple-green, and the claret color, which is the most highly esteemed.



271. Chelsea Figurine: Minerva.

Among the statuettes may be named Milton and Shakspeare, two which were repeated at several factories, Britannia seated on a lion, Falstaff (often reproduced), Minerva, Neptune, Diana, shepherds and shepherdesses, pastoral groups, Cupids. Oriental decorations were used on the earlier wares.



272. Chelsea Figurine: girl playing on pastorella. (Museum of Practical Geology)

The glaze of the Chelsea ware is not so thick as that of Bow, is of a soft milky white, and sometimes has run down on lower rims in tears. The three support-marks are found on some Chelsea dishes, as on those of many other factories. The under rims have often been ground, removing the accumulations of glaze. There is some slight resemblance between the wares and the anchor-mark of Chelsea and those of Venice; but this will not deceive the collector after some experience. Counterfeits were made at Coalport.

The early marks of Chelsea are not fully understood. The impressed triangle has been now assigned to Chelsea because found on one specimen which has also the name *Chelsea*. We have it on a cream-ware teapot, decorated with flowers, and having a daisy knob, and have seen it on other pottery. The anchor on an embossed oval is an early mark. The anchor, painted in various forms, was used later.

Hard-paste porcelain was made, in exceptional instances only, at several English factories, but none produced it as a regular manufacture except the factories at PLYMOUTH, BRISTOL, and LOWESTOFT.

William Cookworthy, of PLYMOUTH, discovered that in Cornwall both kaolin and petunse were to be found, and thereupon established a factory about 1760, at which he made true hard-paste porcelain. The product was never very large nor very beautiful, although a Sèvres decorator—Soqui—was employed. The wares were mostly blue-and-white, imitating the Chinese. Relief work in shells, flowers, and embossed work

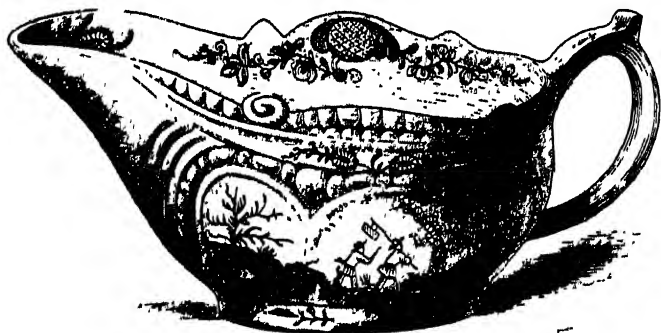


273. Plymouth Coffee-pot. (Prideaux Coll.)

were employed on vases and on services. Many figures and groups were produced, mostly in white, and these as well as other specimens of Plymouth ware bring high prices in England, perhaps on account of their scarceness—certainly not on account of their beauty.

Many of the figures were reproductions of the work of other factories. Blue-and-white wares for table use; salt-cellars in shell forms; sweetmeat and other dishes on rock-work or coral bases; services painted with flowers, birds, and insects in gay colors, with much gilding, were made until 1773, when Champion, of Bristol, bought the Cookworthy patent. The porcelain was of varying hardness, according to the proportion of Cornwall clay used in the paste.

Much of the first work was warped and fire-cracked, the glaze often impure, and the painting decidedly inferior. These difficulties were par-



274. Sauce-boat: Plymouth porcelain.

tially overcome, and the later work was better. From 1768 to 1770, a distinguished enameller—Bone—was employed, and introduced the brilliant "exotic birds," as they are called, which were favorites at Sèvres. The glaze on Plymouth ware is often poor, and the blue, which is the decoration color of a majority of specimens, is cold and blackish. The only known mark is the chemical sign for tin, which Cookworthy adopted, possibly because his materials came from the tin-producing district.

BRISTOL.—Mr. Hugh Owen has given us a ponderous volume on "Two Centuries of Ceramic Art in Bristol," with abundant information and anecdote. The only portion of the two centuries in which there is special interest is included between 1768 and 1782, during which time Richard Champion made hard-paste porcelain. Champion was a merchant at Bristol, whose sympathies, during the American war, seem to have been with the American colonies, and who finally came to South Carolina, where he

died, and was buried at Camden, in 1787. In 1768, according to Mr. Owen, he commenced work in a company in which several others ventured some capital. It does not appear that they actually made porcelain for sale until 1773, when Champion bought out Cookworthy, of Plymouth, engaging to pay him a royalty.

After this purchase, Champion applied to Parliament for an extension of the Cookworthy patent. This aroused Josiah Wedgwood and the Staffordshire potters to strenuous opposition, and brought out the usual characteristics of patent contests. Wedgwood conducted the opposition, and in the course of the proceedings appears as the shrewd commercial potter, looking to personal interest as the primary motive, and determined that he as well as others should enjoy, without cost, the benefits of Cookworthy's discoveries. The decision was substantially against Wedgwood and his friends, the patent being extended, with the proviso that the Cornish clays and stone might be used by others for pottery, but not for porcelain.

Champion continued the works until about 1781, when he transferred the patent to a Staffordshire company. The decorations as well as the shapes were copied extensively from Dresden and Sèvres, and Champion used the Dresden mark. Vases were made of which Champion was especially proud, sometimes hexagonal, painted with "exotic birds," having flowers in relief, and painted with Chinese subjects, or with birds and butterflies, on shagreen or blue salmon-scale grounds. A vase, sold in 1874 for three hundred and five pounds, had two sides decorated in blue, the other four in colors. Oval and circular plaques, with flowers in relief surrounding arms or emblems, were well executed. One of these, with



276. Bristol Vase. Height 12 inches. (Fry Coll.)

a portrait of Benjamin Franklin, brought one hundred and fifty pounds at the same sale with the vase above referred to.

Champion was a warm friend of Edmund Burke, and he and his wife presented to Mrs. Burke a service of Bristol porcelain. Burke, while con-

testing the election in Bristol, formed a friendship for Mr. Joseph Smith, a merchant, and ordered from Champion a service, unlimited in expense, which he presented to Mrs. Smith. This service has been dispersed, and occasional specimens have come into sales. At the same sale above mentioned one cup and saucer of the service brought ninety-three pounds. The festoon style of decoration on this service, a piece of which is here illustrated (276), was somewhat characteristic of Bristol porcelain. Numerous bubbles or pin-holes are visible on some specimens; and another characteristic (marking Plymouth ware also) is a series of spiral ridges, formed by the fingers of the workman in turning the piece on the wheel. Fire-cracks, warpings, and other defects mark Bristol wares. No artistic merit is visible to justify the high prices paid for specimens, but the scarceness of the good wares, and the rarity of the Plymouth and Bristol hard-pastes, may account for them.



276. Bristol Cup and Saucer. (The Burko-Smith service.)

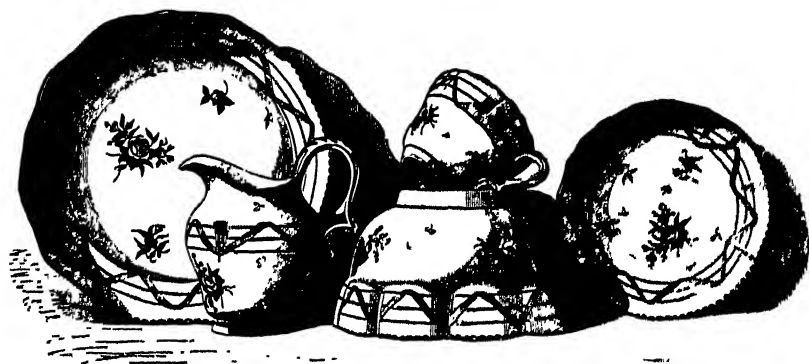
Cheap wares, known as "cottage china," were made, which were decorated, without care, in scattered flowers, green, red, lilac, gray, and pale blue, roses predominating. Borders of ribbons in festoons, with bows and small bunches of flowers at the knots, are characteristic of this as well as the better class of Bristol porcelain. Marks are very rare on the cottage china. Decorators' numbers are on the bottoms roughly painted.

It was sometimes the practice to bake the paste and glaze at one firing, instead of first baking the unglazed ware. Champion also used glaze not fritted (that is, not first melted, powdered, and reduced with water to a creamy consistence). This produced, by the escape of gas from the interior, the peculiar bubble or pin-hole appearance in the glaze which has been mentioned as a characteristic. The wares, like those of Plymouth, are of unequal hardness, but usually very hard, and the glaze is not always pure or perfect.

The marks on Bristol porcelain are a study. Many of the best speci-

mens, notably the vases, are without mark. The ordinary mark is a simple cross in blue or slate color. Numbers which accompany this are said to be those of decorators. They are not found above 24. If in gold, the number indicates the gilder. No. 1 is supposed to be Henry Bone, the enameller; No. 2, William Stephens; but no others are identified. The letter B is another mark, but not to be always depended on. It occurs on other porcelain as a decorator's mark. The Dresden crossed swords, the Plymouth mark, and various combinations were used.

Beyond the quality of rareness, there is little in Bristol porcelain to attract the notice of the collector.



277. Bristol Porcelain. (Owen.)

Pottery was made at Bristol from early times. Tiles were made after 1700 (being known with dates from 1703 onward) at a pottery owned by Richard Frank. Joseph Ring, in 1784, founded the Bristol Pottery, which name appears on its wares, and sometimes a simple blue or lead-colored cross. This cross mark, however, is common on pottery, probably as a workman's mark; and it is not always easy to distinguish Bristol from other English pottery. It is not important, as the wares were chiefly ordinary commercial potteries.

Copper-lustred wares were made at BRISTLINGTON in the last century, of coarse and uninteresting character.

LOWESTOFT.—In 1756, a factory was founded at Lowestoft, which, after considerable difficulty, went into active operation in 1757, under the management of Walker, Brown, & Co., and for twenty years made pottery and good soft-paste porcelain. This ware was not remarkable for beauty, but the porcelain was of fair quality, decorated in blue and in colors, with Chinese patterns, views of Lowestoft and the neighborhood, marine subjects, and flowers. Red and gold bands and morone or scale-pattern borders

Whether hard-paste porcelain was or was not made at Lowestoft has been in doubt; but the researches of Mr. Chaffers have gathered such an amount of evidence that, until it is overthrown, we are compelled to accept the fact that in or about 1775 the factory began to produce true porcelain, and thereafter made large quantities, quite closely resembling the Chinese in paste and quality.

This hard-paste porcelain was decorated usually in very simple, sometimes Oriental, styles, and seems to have been sold in the markets as Oriental porcelain. The only possible explanation of the existence of a large class of wares is that they were produced at Lowestoft, or that the Lowestoft makers had some means of obtaining from China or Japan an abundance of white ware, which they decorated. There is no probability of the latter suggestion being true. An undecorated white Chinese teapot or cup and saucer is such a rarity in England and America that probably no reader of this ever saw such a specimen. There is no evidence that such wares were ever imported into England, but abundant evidence to the contrary. Some of the decorations of the Lowestoft wares are so thoroughly characteristic that no doubt can exist as to their being European and of one locality. All Chinese wares were subject to a heavy duty in England in 1775-1800, and it was impossible to import and decorate them, and compete with other English factories in their sale.



278. Saucer: Lowestoft porcelain.

Many of the decorations were by Thomas Rose, a Frenchman, who painted roses without stems, or with hair-line stems, small bouquets lying in mass on the surface, festoons of small roses and green leaves. The pieces were rarely profuse in decoration. More frequently a single flower, or a small bunch, was the only decoration. The borders were frequently decorated with a band of deep rich blue, with gold stars, meander and other patterns on it and under it. This blue, which is sometimes a thick enamel, is quite characteristic. Red and russet-brown borders are also frequent. The scale pattern, in a purplish pink, abounds. On vases a running border of flowers is sometimes raised on the surface in opaque white, and a raised border of vine-leaves, with foxes, squirrels, and other ani-

mals, sometimes surrounds landscapes in brown monochrome, or Chinese figures.

Large quantities of this porcelain came to America, and it is now more plentiful here than any other kind of porcelain of the last century. In most families possessing it, there are traditions, firmly believed, that it was brought from China by an ancestor. In several cases, where such traditions were told us, we have been able to obtain from old persons the evidence that the services came from England. Thus, in one case, some years ago, where a service in our collection had been procured from a family who believed and had repeated to us such a tradition, we showed a specimen to a lady of clear intellect and memory, who was then eighty-three years old, and asked her if she remembered it. She replied instantly that it was a piece from a breakfast service presented to her sister by her husband as a wedding gift. "Do you remember where it was bought?" "Of course I do. We young people talked a great deal about it, and I remember perfectly that — ordered it from England, and that it came out in a Liverpool ship; and I remember when it arrived, and how we admired the pattern (which had special reference to the name of the lady), and the monogram in gold on each piece. Porcelain," added the lady, "was not so common in my young days as now, and such a service was something to be remembered." It will probably be found in many similar cases that family porcelain supposed to be Chinese is of English manufacture.

Crests, initials, and arms are common on Lowestoft wares. Shields containing initials, with birds as supporters, escutcheons with delicate pencillings in deep blue, are also frequent. Pieces are sometimes very uneven on the surface, especially large pieces, as if from unequal contraction in the paste when baking, or rude work in the moulding.

There is a large class of porcelains decorated with beautiful, but generally stiff, bouquets, and with vine borders in high relief, sometimes with small animals also in high relief, which are Oriental, and are classed by some collectors as "Porcelain of the Indies." These are supposed to have been made on special patterns furnished to the Oriental factories by the East India companies. They resemble European work in the decoration, and many of the Lowestoft paintings seem to be imitations of these.

It is necessary, therefore, to be very cautious in classifying wares as of Lowestoft fabric. Although no undecorated porcelain was imported into England, we do not know that the same was true in Holland, whose India company brought out great quantities of porcelain. We have in our collection a number of examples which we believe to have been decorated in

Holland. Many specimens of the Chinese blue-and-white have additional color decorations, chiefly in red, and we know that at Delft this decorating of Oriental wares was abundantly practised. The presence of a simple decoration like a flower, or sprig of flowers, in European style on a porcelain apparently Oriental is not a sufficient reason for classing the porcelain as European. Many such pieces were painted in Japan and in China. And others are possibly the work of decorators in Holland.

A large bowl in our collection is of the finest Chinese porcelain. The decoration consists of a subject repeated on opposite sides, and executed by an artist without superior in Europe, so exceedingly delicate and exquisite are the drawing and finish. The subject is a caricature, the figure of a man, his right half dressed in clerical costume, his left half in the uniform of a soldier carrying a musket. He stands before a house, in a garden, an orange-tree behind him, which a pig is about to attack. At his feet, on the clerical side, lies an open book, on which we read *CATECHISMUS*; on his military side, a scroll headed *PRIVILEGIEN*. This specimen illustrates a class of ware of which the porcelain seems unquestionably Chinese, while the decoration was certainly executed by a skilful European artist of the highest class. Some Lowestoft wares are of peculiar paste and glaze, clearly not Oriental, and these are easily assigned; but specimens of the class now referred to must be examined with caution.

The Lowestoft works were closed in the early part of this century, about 1804, or possibly somewhat later. No marks are known. Specimens must be selected by the paste and decorations. The blue-and-white are exceedingly like Oriental. A few specimens, with raised hawthorn blossoms or with pierced sides, are known. The glaze is not always of the same color, varying from a tolerably pure white to a light shade of buff, and sometimes having a pearly character, like that produced by the use of bismuth.

At Yarmouth, towards the end of the eighteenth century, the business of decorating potteries made elsewhere was carried on by a potter named Absolon. Views of Yarmouth, marine and other subjects, arms, inscriptions, and mottoes are on the wares, which are generally stamped with an arrow, the mark of an unknown pottery, and signed *ABSOLON YARMO*, or *W. Absolon, Yarm.* The name is also found on wares marked *TURNER*, impressed.

Between 1665 and 1728, Mr. Francis Place, of the Manor House, York, made some experiments in pottery, producing cups and mugs. Horace Walpole says, "I have a coffee-cup of his ware; it is of gray earth, with streaks of black, and not superior to common earthenware."

In 1760, at LEEDS, two brothers named Green made black wares; and about 1775, Humble, Green, & Co. made cream-colored ware. In 1786, Hartley, Greens, & Co. published a catalogue of articles of queen's or cream-colored ware made by them at Leeds Pottery, with a great variety of other articles, and "the same enamelled, printed, or ornamented with gold to any pattern; also with coats of arms, ciphers, landscapes, etc." A German edition of this catalogue is known of 1783, and a French edition of 1785, indicating a large Continental trade. The manufacture has continued down to the present. The Leeds white wares are of the general kinds made in Staffordshire, the surface appearing somewhat softer and more milky. Perforated and basket or wicker work was made in great variety, and embossed masks, flowers, and other patterns abound. Paintings of flowers and insects and transfer prints are not uncommon, and figures and groups are known. Marks are uncommon, and when found are usually LEEDS POTTERY, HARTLEY GREENS & Co., LEEDS POTTERY, impressed. C G, for Charles Green; † under a crown, and an arrow-head, are also Leeds marks.

Don Pottery, so called, was made near Doncaster by John Green, in 1790; and this seems to have been a branch of the Leeds pottery, its products being in all respects similar. The marks were DON POTTERY, or GREEN DON POTTERY, impressed. In 1834, these works became the property of Mr. Samuel Barker, who adopted for a mark the forepaw of a lion holding a flag inscribed DON, and underneath, POTTERY, and occasionally his own name.

CASTLEFORD, near Leeds, was the seat of a pottery, founded in 1770, by Mr. David Dunderdale, where black ware in Wedgwood's style was made, and also a very fine white stone-ware, of which much seems to have come to America, where specimens are numerous. Teapots were made, sometimes having sliding lids, or lids hinged on by metal pins. Table wares were made with the surface divided into compartments by patterns in raised lines, which are sometimes colored blue, and with raised figures and groups in medallions on the white ground, or on blue, brown, or black grounds. Liberty, the American eagle, and other raised-work devices relating to this country were used. Specimens are occasionally marked D. D. & Co., CASTLEFORD; others have two long lines crossing each other in raised slip; and others the number 22 impressed, but more have no mark. Some of these Castleford wares are exceedingly pretty.

William Tomlinson had a pottery at FERRYBRIDGE, in 1792, in which Ralph Wedgwood, a relative of Josiah, became a partner in 1796, and the mark WEDGWOOD & Co. was adopted. The wares are poor imitations of

the genuine Wedgwood jasper and queen's wares. Other Wedgwoods were potters in Yorkshire, and the name F. WEDGWOOD occurs impressed on cream-ware.

The following list, which we take from an excellent little book ("English Pottery and Porcelain," London: the Bazaar office), will be found convenient for reference. It includes many potters not elsewhere named in this volume, some of whose works are good, but of no great historical or art importance.

ALPHABETICAL LIST OF NAMES AND INITIALS FOUND ON ENGLISH WARES.

- | | |
|--|---|
| Absohon, W.—Yarmouth; 18th century. | Davenport—Longport, Staffordshire; 18th and 19th centuries. |
| Adams (William)—Tunstall, Staffordshire; 18th century. | Dawson—Sunderland; 19th century. |
| Adams, J.—Tunstall, Staffordshire; 18th century. | Dillwyn and Co—Swansea; 19th century. |
| Aynsley, J.—Lane End, Staffordshire; 18th century. | Dixon, Austin, and Co.—Sunderland; 19th century. |
| Bailey and Batkin—La End, Staffordshire; 19th century. | Don Pottery—Doncaster, Yorkshire; 18th and 19th centuries. |
| Birch—Staffordshire; 18th century. | Doulton—Lambeth; 18th and 19th centuries. |
| Booth, Enoch—Tunstall; 18th century. | Dudson—Staffordshire; 18th century. |
| Bolt and Co.—Staffordshire. | Dwight, J.—Fulham; 17th and 18th centuries. |
| Bournes Potteries—Belper and Denby, Derbyshire; 18th and 19th centuries. | Eastwood—Staffordshire; 18th century. |
| Brameld—Rockingham; 19th century. | Elers—Staffordshire, 17th and 18th centuries. |
| Bridgwood and Son—Staffordshire; 19th century. | F. G.—Uncertain. |
| Bulkeley and Bent—Staffordshire; 18th century. | Fell—Newcastle-upon-Tyne; 18th and 19th centuries. |
| C. and G. (Copeland and Garret)—Stoke-upon-Trent; 19th century. | Fell and Co.—Newcastle-upon-Tyne; 19th century. |
| C. G. (Charles Green)—Leeds, Yorkshire; 18th century. | Freeling and Co.—Staffordshire. |
| C. and H. (Cookson and Harding)—Staffordshire; 18th century. | Fulham Pottery—Fulham; 19th century. |
| Cadogan—Rockingham, Yorkshire; 18th and 19th centuries. | Gordon, R. G.—Staffordshire; 18th century. |
| Chaffers, Richard—Liverpool; 18th century. | G. (Green)—Leeds, Yorkshire; 18th century. |
| Child—Tunstall, Staffordshire; 18th century. | G. and crown—Leeds, Yorkshire; 18th century. |
| Clews—Cobridge, Staffordshire; 18th century. | Green, Don Pottery—Doncaster, Staffordshire; 18th century. |
| Close and Co.—Hanley, Staffordshire; 18th century. | Green, Stephen—Lambeth; 18th and 19th centuries. |
| Copeland—Stoke-upon-Trent, Staffordshire; 19th century. | Gunter and Co., S. B. B.—Staffordshire? (Probably not potters.) |
| Copeland, late Spode—Stoke-upon-Trent, Staffordshire; 19th century. | H. and S.—Uncertain—Staffordshire? |
| Crystal ware—Staffordshire; 18th century. | Hackwood—Sholton, Staffordshire; 18th century. |
| D. D. and Co. (David Dunderdale and Co.)—Castelford, Yorkshire; 18th and 19th centuries. | Hackwood and Co.—Sholton, Staffordshire; 19th century. |
| | Harding—Staffordshire; 18th century. |
| | Harley, T.—Lane End, Staffordshire; 18th century. |

- Harrison, G.—Staffordshire; 18th century.
- Hartley, Greens, and Co.—Leeds, Yorkshire; 18th century.
- Heath—Staffordshire, 18th century.
- Hereulaneum—Liverpool; 18th and 19th centuries.
- Hollins, S.—Shelton, Staffordshire; 18th century.
- Hollins, T. and J.—Shelton, Staffordshire; 18th century.
- I. E. B.—Uncertain.
- J. Y. (J. Yates)—Staffordshire; 18th century.
- Jobson—Staffordshire; 18th century.
- Keeling, J.—Hanley, Staffordshire; 18th century.
- Lakin—Staffordshire; 18th century.
- Lakin and Poole—Staffordshire; 18th century.
- Leeds Pottery—Leeds, Yorkshire; 18th century.
- Lockett, J.—Lane End, Staffordshire; 18th century.
- Lowesby—Leicestershire; 19th century.
- M., and a number (Thomas Miles)—Staffordshire; 18th and 19th centuries.
- M. N. (Mayer and Newbold)—Staffordshire; 18th century.
- Marshall and Co.—Staffordshire, 18th century.
- Mason, M.—Lane Delph, Staffordshire, 18th and 19th centuries.
- Mason's patent Iron-stone China—Lane Delph, Staffordshire; 18th and 19th centuries.
- Mason's Cambrian Argil—Lane Delph, Staffordshire; 18th and 19th centuries.
- Mayer, E., Hanley—Staffordshire; 18th century.
- Mayer, Joseph, and Co.—Hanley, Staffordshire; 18th century.
- Meigh—Hanley, Staffordshire; 18th and 19th centuries.
- Meigh, J., and Sons—Hanley, Staffordshire; 18th and 19th centuries.
- Miles—Hanley, Staffordshire; 18th century.
- Milson—Bristol, 19th century.
- Minton—Stoke-upon-Trent, Staffordshire; 18th and 19th centuries.
- Minton and Boyle—Stoke-upon-Trent, Staffordshire; 18th and 19th centuries.
- Mist, London—Staffordshire; 18th century.
- Moore and Co.—Southwick; 18th and 19th centuries.
- Mortlock Cadogan—Rockingham, Yorkshire; 19th century.
- Moseley—Staffordshire, 18th century.
- Myat, T.—Lane Delph, Staffordshire; 18th century.
- Neale, J. Hanley—Hanley, Staffordshire; 18th century.
- Neale and Co.—Hanley, Staffordshire; 18th century.
- Neale and Wilson—Hanley, Staffordshire; 18th century.
- Neeld—Staffordshire; 18th century.
- Nell—Staffordshire; 18th century.
- Newcastle—Newcastle; 18th and 19th centuries.
- Opaque Porcelain—Swansea; 19th century.
- P. (Pennington)—Liverpool; 18th century.
- Palmer, Hanley—Hanley, Staffordshire; 18th century.
- Palmer and Neale—Hanley, Staffordshire; 18th century.
- Palmer and Voyez—Hanley, Staffordshire; 18th century.
- Pearl-ware—Lane End (Messrs. Cheatham and Wooley), Staffordshire; 18th century.
- Phillips, E.—Longport, Staffordshire; 18th century.
- Plant, B.—Lane End, Staffordshire; 18th century.
- Poole, R.—Staffordshire; 18th century.
- Pratt, F. and R. and Co.—Fenton, Staffordshire; 19th century.
- Richus and Toft—Staffordshire; 19th century.
- Ridgway—Shelton, Staffordshire; 18th and 19th centuries.
- Ridgway and Sons—Shelton, Staffordshire; 18th and 19th centuries.
- Riley's Semi-china—Staffordshire; 19th century.
- Rockingham—Yorkshire; 18th and 19th centuries.
- Rogers—Staffordshire; 18th century.
- S. (Salopian)—Caughley, Shropshire; 18th and 19th centuries.
- S. and B.—Sibury and Bridgwood, Staffordshire; 19th century.
- S. and Co. (J. Shore and Co.)—Isleworth; 19th century.
- Sadler—Liverpool; 18th century.
- Sadler and Green—Liverpool; 18th century.
- Salopian—Caughley, Shropshire; 18th and 19th centuries.
- Salt—Staffordshire; 18th century.
- Sans, William—Staffordshire; 17th century.
- Scott—Sunderland; 18th and 19th centuries.

- Sewell—Sunderland; 18th and 19th centuries.
 Sewell and Donkin—Sunderland; 18th and 19th centuries.
 Sewells and Co.—Sunderland; 18th and 19th centuries.
 Sharpe—Swadlincote, Burton-on-Trent; 19th century.
 Shorthose—Staffordshire; 18th and 19th centuries.
 Shorthose and Co.—Staffordshire; 18th and 19th centuries.
 Shorthose and Heath—Staffordshire; 18th and 19th centuries.
 Sneyd, T.—Hanley, Staffordshire; 19th century.
 Snitzer—Lambeth; 18th century.
 Spode—Stoke-upon-Trent, Staffordshire; 18th and 19th centuries.
 Spode, Felspar porcelain—Stoke-upon-Trent, Staffordshire; 18th and 19th centuries.
 Spode, Son, and Copeland—Stoke-upon-Trent, Staffordshire; 18th and 19th centuries.
 Steel—Burslem, Staffordshire; 18th century.
 Stephenson, A.—Staffordshire; 18th century.
 Swansea—18th and 19th centuries.
 Swansea, Dillwyn and Co.—18th and 19th centuries.
 T.—Staffordshire; 18th century.
 T. H. and Co.—Uncertain.
 Talor, William—Staffordshire; 17th century.
 Toft, Ralph—Staffordshire; 17th century.
 Toft, Thomas—Staffordshire; 17th century.
 Turner—Lane End, Staffordshire; 18th century.
 Turner and Co.—Lane End, Staffordshire; 18th century.
 Turner's Patent—Lane End, Staffordshire; 18th century.
 Turner, Ralf—Staffordshire, 18th century.
 Twyford, J.—Staffordshire; 18th century.
 Voyez—Hanley, Staffordshire; 18th century.
 Voyez, J.—Hanley, Staffordshire, 18th century.
 W (* * *).—Leeds, Yorkshire; 18th century.
 W. R. and Co.—Etruscan, Staffordshire, 19th century.
 W. S. and Co., on Stockton ware; 19th century.
 W. T. and Co., on Fulham ware; 18th century.
 Wagstaff—Vauxhall; 18th century.
 Walton—Staffordshire; 18th century.
 Warburton, J.—Staffordshire; 18th century.
 Wedgwood—Burslem and Etruria, Staffordshire; 18th century.
 Wedgwood, Etruria—Burslem and Etruria, Staffordshire; 18th century.
 Wedgwood and Bentley—Burslem and Etruria, Staffordshire; 18th century.
 Wedgwood and Bentley, Etruria—Burslem and Etruria, Staffordshire; 18th century.
 W. and B. (Wedgwood and Bentley)—Burslem and Etruria, Staffordshire; 18th century.
 Wedgwood and Co.—Ferrybridge, near Pontefract; 18th century.
 Wedgwood, F.—Stockton; 19th century.
 Wedgwood—Stockton; 19th century.
 Wilson—Hanley, Staffordshire; 18th century.
 Wood, Enoch—Burslem, Staffordshire; 18th century.
 Wood, Enoch, and Sons—Burslem, Staffordshire; 19th century.
 Wood, Ralph—Burslem, Staffordshire; 18th century.
 Wood and Caldwell—Burslem, Staffordshire; 19th century.
 Wright, John—Staffordshire; 17th and 18th centuries.

PART V.

POTTERY AND PORCELAIN OF AMERICA.

I.—ANCIENT AMERICAN POTTERY.

THE history of ceramic art in America prior to the discovery of the Western Continent by the people of modern Europe is buried in obscurity. For the present nothing is known about it, except from the numerous specimens gathered in public and private collections, which are ar-



279. Indian Vase - incised decoration.
(Found in Ohio.)

anged only as remarkable illustrations of an unknown civilization, without order of date, and without classification of styles. There is much reason to hope that careful investigation of the localities in which ancient potteries are discovered, and of the circumstances surrounding them, will yet shed light on the history of this art, and that pottery will in America, as elsewhere, prove to be of importance in ethnological studies.

A descriptive account of the vast variety of American potteries would require too much space for the limits of this work, nor would it be of as much practical benefit to the reader as the illustrations of some of the most interesting and characteristic specimens which are here presented.

Ancient pottery, in greater or less quantity, has been discovered, usually in tombs, in the western part of the United States, in Mexico, Central America, and Peru, while the Atlantic coast has yielded very few specimens, and those of an uninteresting character. From Peru northward to Alaska, on the Pacific side of the continent, the character of the potteries is of much interest, as they sometimes exhibit remarkable artistic

qualities. The same general styles of color decoration occur on potteries found in Peru, Central America, Mexico, Colorado, and eastward to Missouri, while a class of art decidedly different in characteristics and probable origin prevails in the pottery of Alaska, its influence apparently extending southward and eastward till it meets that of Peru. Indications of both styles are found in the western portion of the United States; but, with our present amount of information, it is impossible to affirm whether this is due to local manufacture, or to the importation of the works of the North and the South into the central regions.



280. Indian Vase, incised decoration. (Found in Ohio.)

All the specimens hitherto found are apparently Soft Pottery. On the Southern products we frequently find a thin polish, closely resembling the lustre of the ancient Greek, possibly produced by a varnish. Color decorations are abundant, not more rude than those of the Phœnician and Egypto-Phœnician potteries. Mouldings and modellings vary from rude and barbarous works up to a high art standard.

There is such a relationship between specimens of the potteries found in Peru, Central America, Mexico, and thence northward to Missouri, that



281. Bottle: Peruvian pottery.

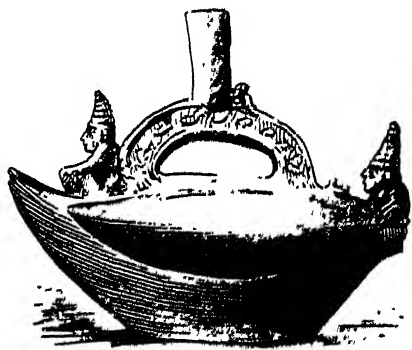


282. Bottle: Peruvian pottery.

no reasonable doubt can exist of a community in the art. At the same time there are characteristics of local fabrics which indicate peculiarities of taste at those localities. But nothing at present known enables us to form any idea of the point of origin of the art on this continent, nor do

the numerous specimens afford indications of a progressive art in any locality.

Specimens of ancient American wares show close resemblances to ancient European fabrics, and theories of their origin in Greek sources have been based on these resemblances. Such theories may be dismissed, for the plain reason that the American potteries bear equally close resemblance to a great variety of wares, ancient and modern, and are, in fact, often more nearly related to the modern fabrics of Europe than to the ancient fabrics of Phenicia. Occasional specimens are like the Phenician in decoration; others, equally remarkable in resemblance to the Greek; others, like the Italian of the sixteenth century. If this resemblance proves anything, it would indicate a late derivation of art instruction from Europe, an instruction which included hints taken from the whole history of ceramic art. A vase illustrated by Tschudi ("Antiguedadas Peruanas," plate 27) has a decoration in hollow crosses and hollow squares, connected in regular patterns, colored white, black, and red, which might have been (and perhaps was) executed by an Italian.



283. The Caballito. (Found at Chimu.)



284. Bottle. Peruvian pottery.

Other specimens, illustrated in the same volume (plate 36), are decorated in black, red, and white, in bands, lines, and patterns so Phenician in character that they might have come from the temple-vaults of Kurium. A Central American head in the Trumbull-Prime collection has for a cap a lizard, the head in front, the feet on each side, the body and pendent tail behind, precisely like the panther or lion skin cap of the ancient Greeks. On a black Peruvian bottle in our collection, the sole ornament is a lizard winding around the bulb, holding his tail in his mouth.

The meander pattern, a scroll drop pattern, and other familiar Greek decorations abound in colors on Peruvian potteries. But these are in all

cases such patterns as are the natural result and growth out of combinations of straight lines in checks, and circles crossing each other and crossed by straight lines.

The colors used are red, black, yellow, and white. Elaborate paintings are occasionally executed. The illustration (286) is from a vase in possession of Mr. Squier, this being only an extract from the extensive design, which represents a procession approaching a king. This class of paintings presents no features which give any hint of a foreign origin of the art.

It may sound like an exaggeration, but it is nevertheless true, that at some period the Peruvian potters have made as bold artistic work as the Egyptians, Phenicians, or early Greeks, in models of the human head and countenance.

Specimens are frequent which are of a very high order of merit. The vase which is illustrated (285) is marvellously like a Greek head in the Trumbull-Prime collection. Many Peruvian works of this class are noble expressions of thought.



285. Jar: Peruvian pottery.



286. Painting from a Peruvian Vase.

When were these artistic works produced? Are they original Peruvian art, or do they belong to the period after the arrival of Europeans in Peru?

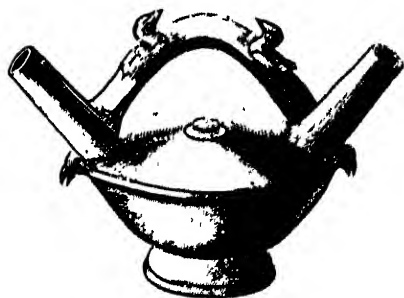


287. Vase from Santa.

Some scholars assign to all the Peruvian and Central American potteries an extreme age. One ceramic authority dates his specimens thousands of years ago. The entire question of the period of that civilization which produced these works of art is involved in such gloom, and hitherto so little has been offered to elucidate the mystery, that these dates are wholly arbitrary, without support.

It is to be observed that the works of high art of which we have spoken are exceptional specimens, and do not form a class, nor are there known specimens of inferior and improving work in the same styles. They stand as wholly distinct from the gen-

eral mass of American pottery as if they had been the work of a Greek artist temporarily resident among the Peruvian potters. They are not the culmination of any known school of art. The three specimens from Cuzco, shown in Ill. 289, exhibit the extraordinary intermingling of the artistic with the barbarous, which characterizes all collections of Peruvian pottery. The head on the right of these three specimens is, however, important, as we shall presently see in considering the age of



288. Peruvian Coast Pottery.



289. Pottery from Cuzco. (Collection of Señora Zentino.)

this style of work.

In examining such potteries, it is important to avoid the hasty conclusion to which many students come who find in the identity of simple forms and decorations convincing evidence of relationship. Round objects in pottery of various patterns are common to all peoples, savage

and civilized, because the most easily made. Incised decorations are equally common for the same reason. Circles, straight lines, herring-bone, chevron, diamond, and other simple patterns, are universal. Out of these early decorations grow others, which are quickly perceived by the artist's eye, whether Greek or Peruvian. The coincidence of such simple forms of pottery and patterns in the decoration of works of different nations is of no value in determining relationship. But when a peculiar form has long been in common and favorite use by one nation, and occasional specimens of the same form are found among the works of another nation not accompanied by preceding forms from which it might have grown, there is a slight ground for suspicion that the latter may have been suggested by the former.

The old Italian form of water-pitcher is perpetuated in the most common modern form of ewer. This is derived from ancient patterns, but came into a peculiar shape in Italy in the fifteenth century. An illustration is given at page 171 of a *boccala*, decorated at Gubbio, in the early part of the sixteenth century.

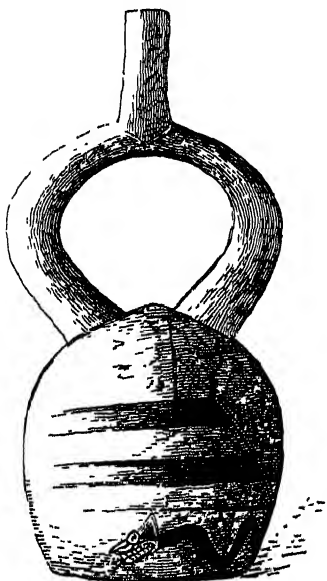
In the Trumbull-Prime collection are two large ewers, from Central America, of similar form, one in black, the other in red, pottery. We illustrate the latter (Ill. 290). The decorations are incised or impressed, circles and semicircles being produced with the end of a reed, or a half reed, used as a stamp. The form is not common in American pottery. It is substantially that of the ewer which was common in Italy and Spain when the Spaniards came to America. We incline to believe these ewers made after the Conquest, on European models. The decorations are similar to those found on potteries of different form. If the ewers are later than the Conquest, the other specimens are of a period not far distant.

In a collection of Peruvian pottery in St. Louis, Missouri, which we have not had opportunity to examine, but of specimens of which we have photographs, is a bottle or vase in the shape of a head. Whatever be its period, it is a wonderful specimen, worthy the hands of any sculptor. It is a noble and perfect work, with the expression and the very smile of



290. Ewer: Central American pottery. (T.-P. Coll.)

life. Every feature is admirably modelled. But the head is that of a negro. The flat nose, the thick lips, the whole face, the very smile and expression, are the type of the African, and it is probably a portrait. If this be so, the vase is, of course, later than the Conquest. If the model of whose head this is a portrait was an Indian, he must have been one of those who are so numerous on the Isthmus, in whose features the African type has become superior from the admixture of African blood; which we know, as an historical fact, occurred extensively about a century ago, when large numbers of negroes went from Cuba to Honduras and united with the Indians. In that case the vase is quite modern.

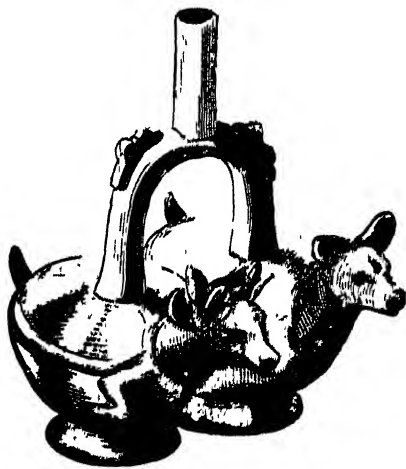


291. Peruvian Bottle: Coast pottery.

Among a number of pottery figures which came into our possession as a collection of ancient Mexican work, one has the inscription CALIFORMIA, on the front of the pedestal. This is, of course, comparatively modern.

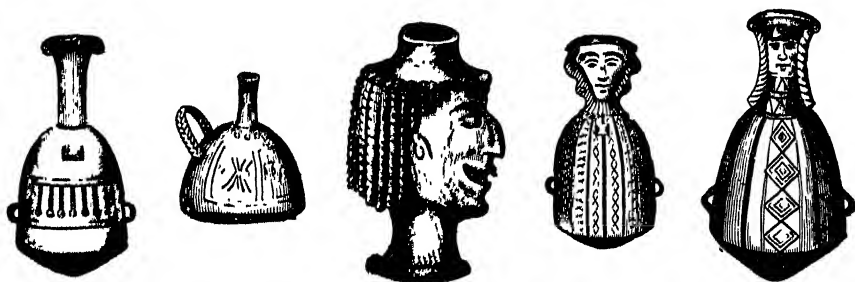
If our ewers were made since the discovery of America, there can be no doubt that many other objects in our own and in other collections are of date not far distant from them. The relationship, in style and general character, is plain.

Mr. Ewbank ("Life in Brazil," 1856) gives a series of illustrations of ancient Peruvian pottery from a collection formed by General Alvarez, commandant of the province of Cuzco, which passed into the hands of Senhor Barboza, of Rio Janeiro. We have reproduced some of these illustrations (III. 293). Mr. Ewbank devotes an extended notice to the bottle, which is in the form of a human head with long curls. This, he says, "represents the head of the famous cazique Ruminahauy." The portrait seems to be identified, even to a scar on the cheek.



292. Peruvian Coast Pottery.

Ruminahui, or Rumminauui, was a celebrated chieftain at the time of the conquest of Peru, mentioned by De la Vega. He schemed to succeed Atahualpa, and, after fighting with the Spaniards, and accomplishing various barbaric murders, was overcome, and driven into the mountains.



203. Peruvian Vases. (From the collection of General Alvarez. Ewbank.)

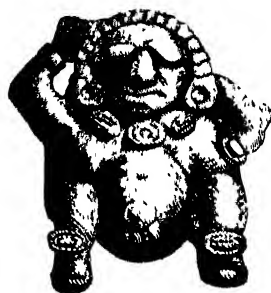
The vase before referred to, from (Uzco (Ill. 289), is another portrait of the same person, with the same scar on the cheek. If these vases be indeed portraits of a man who lived in 1532, it is greatly to be lamented that we have no information of the places and attending circumstances of their discovery. These are typical heads, many which closely resemble them being found among Peruvian potteries. We have quite similar heads in our own collection. They resemble a large class of pottery, and the character of the tombs in which these were found might serve to date other specimens found in other tombs with similar accompaniments.



204. Peruvian Coast Pottery.

Mr. Squier (to whose work we are indebted for many of the illustrations of Peruvian pottery here given) describes the contents of some Peruvian tombs in which pottery was found ("Peru," etc., by E. G. Squier, 1877, pages 78-81). The perfect preservation of the large variety of perishable objects in such a tomb at Pachacamac, the cloths and blankets the patterns of which are given, the undecayed condition of the wrappings of the bodies, the household utensils and articles of personal use and adornment, made of perishable materials, but found in good condition, would be wonderful in any other country than Egypt, if four hundred years had elapsed since the burial. With-

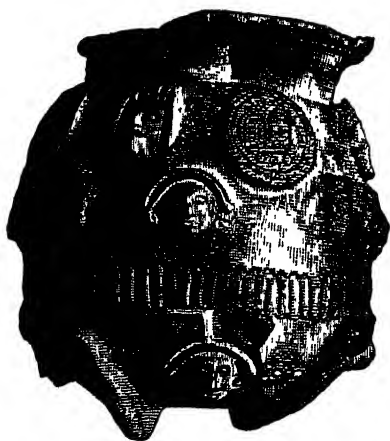
out information as to the peculiarities of the climate of Peru, we cannot form an opinion as to the probable duration of cloths in colored patterns, and other articles found in such tombs. But all the facts which we at present possess fail to give any evidence of extreme age for any of the Peruvian potteries. On the contrary, the indications are opposed to theories of great antiquity, and rather lead to the belief that the period of the best Peruvian art was not long before or after the beginning of the sixteenth century. This idea is safe, and sustained by what few facts we possess. It will be ample time to adopt ideas of great antiquity when facts are known to justify them.



295. Nicaragua Pottery.

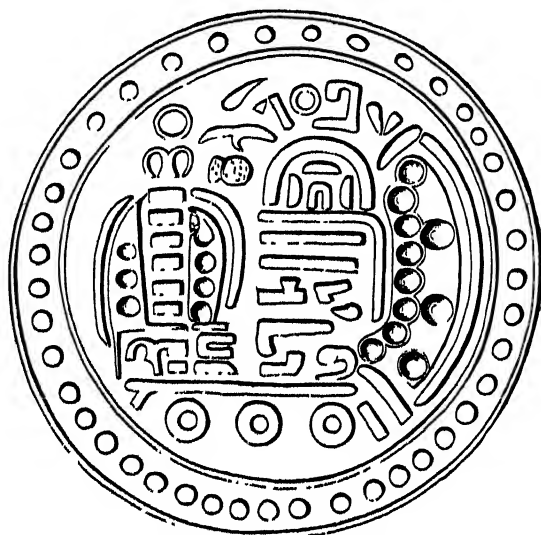
The forms of Peruvian pottery are many. Double jugs are common, and jugs with two spouts, the latter form being regarded as characteristic of the potteries found on the coast, which are often quite different in style from those found in the interior. Birds, fish, animals, fruit, vegetables, shells, were all used as forms of vases. The entire human form was never well modelled, while heads and busts were often excellent. The vase (Ill. 287) found in one of the largest pyramidal mounds in Peru, near Santa, affords an illustration of the expressive style of countenance which Peruvian sculptors were able to produce.

In the Trumbull-Prime collection is an interesting vase, discovered on the isthmus of Tehuantepec by an exploring party of railway engineers (Ill. 296). It is of red unglazed pottery, the surface giving indications of a polish which resembles that of the Egyptian red wares, and approximating to the lustrous surfaces of Greek vases. It formerly stood on high feet. Its present height is 12 inches, and greatest diameter 10 inches. The decorations are relief masks and figures, rudely but expressively executed. The important feature of this specimen is a peculiar stamp impressed in four fac-similes, on raised lumps or bosses, on four sides of the vase. This stamp (Ill. 297) is evidently intended to express ideas by signs, and is one of the very rare examples of early American language in visible characters.



296. Vase from Tehuantepec, with inscriptions in circles. (T.-P. Coll.)

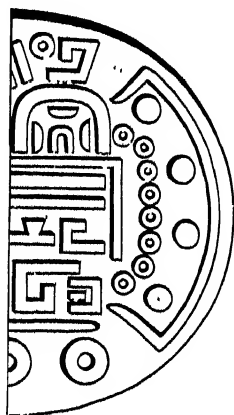
Similar signs have been supposed to express dates. On a vase in the Smithsonian Institution, at Washington, a similar mark occurs, also impressed as on our specimen, and very closely resembling the one-half of



297. Stamped Inscription (exact size) on Tehuantepec Vase. (T.-P. Coll.)

this device, many of the signs being identical. The size is precisely the same. But on the Smithsonian vase only one-half of the circular stamp appears (Ill. 298). Certain signs are missing which are on our specimen, and the number of circles at the right is not the same. The impression is better on the Smithsonian specimen, and enables us to complete forms of signs which are imperfect on the Trumbull-Prime vase. These marks have been the subject of careful study by learned gentlemen, but as yet they have not been satisfactorily translated. On a pottery image from Cuzeo (Ill. 289), and on a figure (Ill. 281) will be seen some marks of character similar to these.

In our collection we have preserved, out of innumerable specimens of Peruvian, Central American, and Mexican potteries which have been brought to New York, only such objects as seemed illustrative of the history of the art in America, and positive aids in endeavoring to determine age. While there are distinctions in the forms of the raised decorations, which characterize dif-



298. Inscription on Vase in Smithsonian Institution.

ferent localities, the art is one, in all cases, from Peru, in the south, to Missouri, in the north. The same pottery, the same forms, the same color decorations, the identical patterns of colored ornamentation, are found in Peru and in the mounds recently opened in Missouri. A peculiar style of relief work in prominent sharp points, sharp features of human faces, sharp projecting noses, sharp flanges on head-dresses in short, what we may call high sharp-pointed relief—appears characteristic of some Mexican work.

In Missouri, considerable quantities of pottery have been found in burial-mounds, showing two classes, the one the ordinary local ware, resembling that of New England and of many savage tribes; the other apparently imported from regions to the south-west; or, if made where found, made in paste and decoration like the potteries of Mexico, Central America, and Peru. Some specimens, at least, seem to have been imported, and exhibit a commercial intercourse in former years.

Still farther westward, in Arizona, potteries have been found of two classes—the one allied to those of the southern countries, the other to those of Alaska.

The potteries of Alaska are of a better quality in paste and baking than any others on the American continent. Some of these are in large vases, the paste compact and firm, covered with a grayish-white wash, which is polished, much in the style of many of the Phœnician wares, on which bold devices in black and dark red are painted in firm, accurate lines.

In the mounds of Ohio some interesting specimens have been found, showing rude decoration in incised work (Illa. 279, 280).

The potteries of the Atlantic coast have little artistic interest. They are of the simplest forms, and such as savages often produce. In New England, perfect specimens are exceedingly rare. Fragments found in various localities indicate the bowl as the most common form. In the pastes of the Connecticut valley we find mica often mingled with the clay, as in the Celtic wares of Ireland and in the black wares of Etruria, possibly for the brilliant effect produced by the particles which remain bright, as the heat of the baking was not great; possibly only because the clay from which they were made was micaceous.

II.—POTTERY AND PORCELAIN IN THE UNITED STATES.

After the settlement of America by Europeans, coarse pottery was made in various parts of the country, but no artistic work was attempted. Our ancestors used pewter and wooden dishes. Pottery was not common in American houses until the middle of the eighteenth century, and few of the people of Revolutionary times had seen porcelain. Tea was not used in Europe until the middle of the seventeenth century, and was not known in America prior to 1710. Teapots and tea-services were not made in Europe until the latter part of the seventeenth century. It has been questioned whether the porcelain teapot is a Chinese or a European invention. When Delft pottery began to be used for table and household purposes in England, it is probable that small quantities found their way to this country, but neither crockery nor porcelain took the place of pewter and wood on American tables, and the importations increased but slowly with the increase of population and wealth. Wooden trenchers, pewter dishes, mugs, water-pitchers, etc., continued in general use until the present century.

By an examination of early newspapers, we are enabled to learn much of the character of the table furniture which dealers advertised for sale, and this was probably alike in all parts of the country. We find pewter always prominent. In the *New Haven Gazette* of September 30th, 1784, a druggist advertises Wedgwood mortars and pestles. In the same paper, October 21st, a dealer advertises "blue-and-white stone-ware, consisting of butter-pots, jars, and cans;" also "quart, pint, and half-pint water-flasks; matted ditto; spaw ditto; Bristol ditto." In the same paper, November 25th, a dealer advertises "queen's-ware in small crates, well assorted," which had been imported direct to New Haven; and December 2d, he advertises "English china cups and saucers." On November 4th, 1784, the same dealer advertised "a large assortment of coarse stone-ware in crates, large round bottles holding near two quarts, in small convenient hampers, and quart, pint, and half-pint flasks"—with a discount to those who buy large quantities. This last advertisement may refer to wares made in America. In 1785, we find advertised "Nottingham, queen's, china, and glass ware." "Nottingham ware" had long been a popular name in England for brown potteries, originally made at Nottingham, and the name continued in use here until a very recent date.

Bricks and ruder forms of pottery were made in New England in the eighteenth and possibly in the seventeenth century. Josiah Wedgwood, in a letter written 1765, speaks of a pottery then projected in the Carolinas, of whose work he had great apprehensions; and he seems to desire some government interference to prevent the colonies from making their own pottery, and thus injuring the home business. Before the end of the eighteenth century many potteries were established in various parts of the country, but, so far as is now known, no articles were produced except the ordinary coarser kinds of household utensils in stone-ware.

"A Brief Examination of Lord Sheffield's *Observations on the Commerce of the United States*," by Matthew Carey, was printed in successive numbers of the *American Museum*, in 1791, and collected in a volume, published the same year, at Philadelphia, with a supplementary note on "the present state of American manufactures," etc. On pages 126, 127 are the following observations:

Manufactures of glass, of earthenware, and of stone, mixed with clay, are all in an infant state. From the quantity and variety of the materials which must have been deposited by nature in so extensive a region as the United States, from the abundance of fuel which they contain, from the expense of importation, and loss by fracture, which falls on glass and earthenwares, from the simplicity of many of these manufactures, and from the great consumption of them, impressions of surprise at this state of them, and a firm persuasion that they will receive the early attention of foreign or American capitalists, are at once produced. Coarse tiles and bricks of an excellent quality, potter's wares, all in quantities beyond the home consumption, a few ordinary vessels and utensils of stone mixed with clay, some mustard and snuff bottles, a few flasks or flagons, a small quantity of sheet-glass and of vessels for family use, generally of the inferior kinds, are all that are now made.

Hamilton's return of *Exports* of the United States from August, 1789, to September, 1790, printed in the Appendix to Carey's book, gives, for earthen and glass ware, nineteen hundred and ninety dollars.

In Miss Caulkins's "History of Norwich," chap. xlix., it is stated that in 1796 "a pottery for the manufacture of stone-ware was established at Bean Hill, which continued in operation far into the present century, seldom, however, employing more than four or five hands." In Morse's "Gazetteer," 1797, we read, under Norwich, that the inhabitants manufacture "stone and earthen ware." In the *Norwich (Conn.) Gazette*, September 15th, 1796, we find this advertisement of a pottery, which appears to have been in operation by a Mr. Lathrop prior to 1796, and is, without doubt, the one referred to by Miss Caulkins and Dr. Morse:

C. POTTS & SON informs the Public, that they have lately established a Manufactory of *EARTHENWARE* at the shop formerly improved by Mr. Charles Lathrop, where all kinds of said Ware is made and sold, either in large or small quantities, and warranted good.

A memorial of Samuel Dennis, dated New Haven, October 9th, 1789, to the General Assembly of Connecticut, shows: "That he is acquainted with the potter's business, and is about to erect a stone pottery; and there is in this country a plenty of clay which he presumes of the same kind with that from which the queen's-ware of Staffordshire is usually made; and that he wishes to erect a pottery for the purpose of manufacturing the finer kinds of ware usually made in Staffordshire, particularly the queen's-ware," and he asks the aid of the State in founding the works. His memorial was negatived, and it does not appear whether he went on with his project.

Isaac Hanford, of Hartford, Connecticut, took out a patent, January 20th, 1800, for a new method of making bricks, tiles, and pottery ware in general, and of discharging the moulds. Nothing further is known of his work; but coarse pottery has, from the beginning of the century, been made in Hartford. Prior to 1800, a pottery was in existence at Stonington, Connecticut, managed by Adam States, who was succeeded in the business, after 1804, by his sons, Adam and Joseph. They made jugs, butter-pots, jars of all sizes, and some small wares with handles, uniformly of soft pottery, usually gray in color, with salt glaze. Contemporary with this was a pottery at Norwalk, Connecticut, which made red wares of soft pottery in many forms. We learn from a lady, whose memory extends back to 1804, that it made jars and pots of all sizes, teapots, mugs, and large milk-pans, then in common use among the farmers in Connecticut. A specimen in our collection is glazed with a lead glaze, the color deep red, with flashes of black, probably caused by smoke in the firing. Other potteries produced wares similar to the Stonington and Norwalk.

From a report of the Secretary of the Treasury (Mr. Gallatin), made in 1810, it appears that the exports of "coarse earthenware" exceeded the imports. In this report the Secretary says that progress has been made in the manufacture of "queen's and other earthenware," and that "a sufficient quantity of the coarser species of pottery was made everywhere. Four manufactories of a finer kind had lately been established, which made ware resembling that of Staffordshire." Dr. Dwight, in his travels (1822), after quoting the above, states that he had gained access to the Reports from Massachusetts and Connecticut, upon which the Secretary's Report had been founded, and gives among the manufactures of Conne-

ticut for the year, "potteries, twelve;" "value of earthen and stone ware, \$30,740;" and for Massachusetts, "earthenware, \$18,700."

Before the end of the last century, direct trade had been established between the United States and China, and Oriental porcelain began to make its appearance in America. The English trade increased rapidly in the early part of the present century, and English manufacturers had begun to decorate pottery with American subjects for the American market. Porcelain seems to have been decorated at Lowestoft with American designs, for special orders, before 1800.

It does not appear that any attempt has hitherto been made to manufacture pottery of the higher classes. The "queen's-ware" referred to in the Report of the Secretary of the Treasury in 1810, if made at all, was probably not the ware known by this name in England. We find, by inquiry from elderly persons now living, that they understood queen's-ware to be a heavy, white pottery, which was used for baking and similar purposes.

A paragraph in the *Edinburgh Weekly Magazine*, in January, 1771, says: "By a letter from Philadelphia we are informed that a large china manufactory is established there, and that better china cups and saucers are made than at Bow or Stratford."

We are indebted to a gentleman of Philadelphia for the following information concerning this manufacture:

"China works" were established in Philadelphia, and in operation, in 1770. I discovered this fact about two years since while examining some old papers, which led me to examine the newspapers of the day, and there I found an advertisement under date December 29th, 1769, headed "New China Ware." It states that "Notwithstanding the various difficulties and disadvantages which usually attend the introduction of any important manufacture into a new country, the proprietors of the CHINA WORKS now erecting in Southwark have the pleasure to acquaint the public they have proved to a certainty that the clays of America are productive of as good PORCELAIN as any heretofore manufactured at the famous factory in Bow, near London," etc., etc. Subsequently there is an advertisement for "shank bones" delivered at the China factory in Southwark, signed G. Bonnin and G. A. Morris. Then, in April, 1772, there is an advertisement for "several apprentices to the painting branch," etc. In addition to the fact of the existence of the manufacture, I have found also some few undoubted specimens of the work, which are now deposited at the Franklin Institute on exhibition.

Another porcelain factory was established in Philadelphia at a later period, as appears from the following *Extract from the proceedings of the "Historical Society of Pennsylvania" at their rooms, May, 1868.*

Miss Peters presented a beautiful pitcher, made at the porcelain establishment of Messrs. Tucker & Hemphill—a very creditable specimen of American manufacture. At the request of the society, Thomas Tucker, Esq., prepared the following paper on the manufacture of porcelain in the United States, which was read by the secretary, and ordered to be published (in the papers of the day).

To the Historical Society of Pennsylvania:

Philadelphia, May 13th, 1868

GENTLEMEN,—Herewith please find a small account of the manufacture of porcelain in the United States.

William Ellis Tucker, my brother, was the first to make porcelain in the United States. My father, Benjamin Tucker, had a china store in Market Street, in the city of Philadelphia, in the year 1816. He built a kiln for William in the yard back of the store, where he painted in the white china, and burned it on in the kiln, which gave him a taste for that kind of work. After that he commenced experimenting with the different kinds of clays, to see if he could not make the ware. He succeeded in making a very good opaque ware, called queen's-ware. He then commenced experimenting with felspar and kaolin to make porcelain, and, after much labor, he succeeded in making a few small articles of very good porcelain. He then obtained the old water-works at the north-west corner of Schuylkill, Front, and Chestnut, where he erected a large glazing kiln, enamelling kiln, mills, etc. He burned kiln after kiln with very poor success. The glazing would crack, and the body would blister; and, besides, we discovered that we had a man who placed the ware in the kiln who was employed by some interested parties in England to impede our success.

Most of the handles were found in the bottom of the seggars after the kiln was burned. We could not account for it, until a deaf and dumb man in our employment detected him running his knife around each handle as he placed them in the kiln.

At another time, every piece of china had to be broken before it could be taken out of the seggur. We always washed the round O's, the article in which the china was placed in the kiln, with sillex; but this man had washed them with felspar, which of course melted, and fastened every article to the bottom. But William discharged him, and we got over that difficulty.

In the year 1827, my brother received a silver medal from the Franklin Institute of Pennsylvania, and in 1831 received one from the Institute in New York. In 1828, I commenced to learn the different branches of the business.

On the 22d of August, 1832, my brother William died. Some time before, he connected himself with the late Judge Hemphill. They purchased the property at the south-west corner of Schuylkill, Sixth, and Chestnut streets, where they built a large storehouse and factory, which they filled with porcelain. After the death of my brother, Judge Hemphill and myself continued the working of porcelain for some years, until he sold out his interest to a company of Eastern gentlemen; but being unfortunate in their other operations, they were not able to give the porcelain attention. In the year 1837 I undertook to carry it on alone, and did so for about one year, making a large quantity of very fine porcelain, many pieces of which I still have. The gilding and painting is now as perfect as when first done.

I herewith present you with a pitcher which I made thirty-one years ago. You will notice the glazing and transparency of this specimen as equal to the best imported china; but the gilding, having been in use so many years, is somewhat injured. I would like to give you a larger article, but I have but few pieces left. Very respectfully yours, etc.,

THOMAS TUCKER.

We have specimens of the Philadelphia ware of Tucker & Hemphill which are of excellent porcelain, but the decoration indicates want of experience.

In 1847, a factory was established in Bennington, Vermont, by Messrs. Lyman & Fenton, and continued in operation till about 1860. Pottery was made in various forms, with good enamel; bisque or Parian wares were produced, and soft-paste porcelain of good quality, well decorated. So far as is at present known, this was the first American factory which has attempted to make figures of men and animals. We have a pair of lions in pottery, with tortoise-shell enamels, an eagle and child in white bisque, and other figurines. A peculiar enamel seems to have been patented by Mr. Fenton of this firm, which was used on some of the pottery. The impressed mark on pottery of this class was arranged in a circle, "LYMAN, FENTON, & Co., FENTON'S ENAMEL, patented 1849, Bennington, Vt."

Some time prior to 1829 a factory was established in Jersey City, New Jersey, by persons not now known (said to be French), which made hard-paste porcelain. No mark was used. We have specimens of this ware, which is of fair quality—pure paste, white with gilded rims, without color decoration. The enterprise was not successful, and in 1829 David Henderson & Co. bought the works, and carried them on under the name of the American Pottery Company. They made white and brown potteries, decorating the former with prints, and the latter with colored enamels and raised work; and also a translucent pottery, which is apparently a natural soft-paste porcelain. Their mark was "AMERICAN POTTERY Co., JERSEY CITY, N. J.," in a circle, stamped in the paste. They executed work for druggists and other dealers in New York, printing labels on their jars, boxes, etc. A favorite pattern was a brown pottery pitcher, the handle a hound, the surface covered with a raised representation of a hunt. It was made in various sizes, and is still produced, with a changed form of the same decoration. In 1855, Messrs. Rouse & Turner became proprietors of the factory, and have since carried it on with much success, producing granite, Rockingham, and stone wares, plain and decorated, for table and general use. They use clay obtained from Woodbridge, New Jersey, and another clay from South Carolina; and occasionally a clay from Glen Cove, Long Island, which contains silex. They use no mark on their fabrics.

Important works are now in operation at Baltimore, Maryland, and at Trenton, New Jersey, making varieties of pottery, plain and decorated, and stone-wares of good quality.

A porcelain factory has been established at Long Island City, opposite New York, by T. C. Smith & Sons, which is in successful operation, making excellent commercial work of various kinds and styles. The kaolin in use here is imported.

This sketch of the history of ceramic art in America is necessarily imperfect, and subject to correction when more full information can be obtained. It is, however, manifest that hitherto America has been content to depend on Europe, China, and Japan for her supplies of beautiful pottery and porcelain. Within the past two years an increased demand has been visible for the higher qualities of decorated porcelain. To meet this demand, some of the New York merchants have employed foreign artists to decorate wares here, and admirable work has been produced. White hard-paste porcelains are now imported from Continental factories of Europe, and painted in New York, chiefly in the styles of the decorators of Berlin, Limoges, and other foreign factories. No attempt at original patterns has been made, nor is it probable that purchasers are always aware that they are buying porcelains decorated in America. Ground-colors, especially shades of claret and of green, are executed with quite as perfect evenness and beauty of tint as the best commercial works of Europe.

Occasionally are seen in the shops modern Sèvres porcelains, with the cent mark, which have been decorated in New York by persons of some skill, and hard-paste cups and saucers of Limoges ware, prettily ornamented with portraits and other designs. These are the work of industrious women and others, and are to be noted as among the first efforts in America in decorative ceramic art. As such, they deserve hearty encouragement. We have also met with very good faience decoration, executed here for sale by various individuals.

The exhibitions of the Metropolitan Museum of Art have exerted a manifest influence in elevating the taste of the people in domestic crockery and china, and this influence is felt in the increase of the importation of really artistic wares. The general subject of ceramic art is attracting more and more attention. Private collections are increasing in number. Public exhibitions in various cities and towns have shown the wealth of beauty which rests in old pantries, and revealed to many, what they had regarded as an inexplicable mystery, the fascination of beautiful pottery.

The money value of art is beginning to be recognized. The utility of beauty, as a commercial article, an object of industry, a means of employing labor, will soon be more appreciated. Then, let us hope, our laws will cease to prevent the American, as they now do, from competing with the European in purchasing the priceless examples of old art industries, and museums in every city and village will grow up, to teach the artisan and his family, first, the pecuniary value of making useful things beautiful, and next, the civilizing, refining, and elevating influences of beauty in all things.

III.—COLLECTORS AND COLLECTING IN AMERICA.

Having thus far endeavored to furnish such a condensed account of the history of ceramic art as may serve him for reference, and introduce him to the study, I propose, in this concluding section, a free talk with my reader, without order or method, on the general subject, and matters related to it.

If he has but turned over the pages of this volume, without attempting to master the details of the long history of this, the oldest and most widely extended of human arts, he cannot fail to have been impressed with this fact at least, that the fabrication and ornamenting of baked clay is one of the most important of the industrial arts practised among men. If he had formerly wondered at the enthusiasm with which collectors have gathered specimens of this art, he may now be able to appreciate in some sort the fact that the objects in their collections are not mere curiosities, but are examples of human industry, and illustrations of artistic skill in various times and countries; that the finger-marks of the Phenician potter on a vase are as legible records of Phenician thought as inscriptions on stone; that the enamel on an Egyptian bowl is the recorded evidence of an ancient inventive mind; that the paintings on French, German, and English porcelain are beautiful ideas, and sometimes ideas which are characteristic of great branches of the human family.

The collecting of specimens of ceramic art has been the enjoyment and profit of the most accomplished men and women in ancient and modern times. The Greeks, in the days of their art glory, valued pottery; surrounded themselves with the best specimens, ancient and modern; knew no greater treasures with which to reward victors in the games; so thoroughly loved their noble vases, that, when they died and were buried, surviving friends found pleasant solace for grief in placing these cherished works of art in the tombs of the dead lovers of art, thereby to make the grave seem less lonesome.

When the Romans found in the Greek graves at Corinth the fine old vases of the previous centuries, they admired the marvellous relics of an art not then long lost, but apparently forgotten, and began to gather Greek pottery as the illustration of old skill and artistic ability.

The modern collector finds himself in excellent company. Men and women of note, poets, artists, authors, statesmen, soldiers, kings and queens,

are among the known collectors of the present and the last century. Royalty elbows Republicanism in a bric-à-brac shop, seeking old china. I have seen an American lady purchase a rarely fine specimen of Dresden, and five minutes later, a grand duke, a renowned soldier, trying to induce her to yield the purchase to him. A greater man—Mr. Gladstone—has, by his judicious collections in ceramic art and his thorough appreciation of the subject, been of marked service to the industries of England. The Duke of Wellington appears in the list of English collectors as an admirer of Sèvres and Dresden. Lord Nelson was celebrated as a lover of fine porcelain, and factories are proud to place on record his visits and purchases. Eight members of the Rothschild family have collections, some of which are among the finest in the world. The Queen of Holland preserves the works of the old factories of her country. The Queen of England heads the list of English collectors in all departments of ceramic art, and her personal loans to the public exhibitions of England are of no small importance. Mr. Marryat catalogues nearly three hundred private collections of pottery and porcelain in Europe, and doubtless omits many thousand which are not known to the public.

The "idea" of a collection of ceramic art is just what suits the fancy of the collector. Whatever be his idea, a collection cannot fail to be of some service to him, and to those who inspect it. It is only in great public museums that the art in all its departments can be properly illustrated. But the private collector need not be deterred by the apparent magnitude of the field on which he enters. He may cultivate small tracts, and reap rich harvests, harvests which will be stores of food and refreshment.

Knowledge and educated taste in pottery and porcelain are of the highest domestic importance. If one does not desire to study the history of ceramic art, and make a collection of beautiful specimens, he or she may at least learn to adorn home life and the home table. The log-cabin, in the northern mountains, in which this concluding section is written, furnished simply as a fishing-lodge on the bank of Lonesome Lake, shines like a palace in the light of the blazing logs on the hearth, with the glow of an old pottery dinner service arranged on the shelves. Its decoration is one of those strange patterns of mingled print and painting which such English manufacturers as Minton and Miles Mason and others produced in the early part of the century, on which they lavished color, and thus obtained the finest results of their art. For a grand beauty of pottery and porcelain is color. It makes comparatively little difference how it is put on, if the color be pure and rich, and then it shines as on no other work of art. Therein the Orientals excel. Who cares what high art there is in

the decoration of a Chinese dish, so the colors be good? No house, bridge, man, or flower on an Oriental plate looks like a house, bridge, man, or flower; but if the objects are indicated in the gleaming colors in which the Oriental porcelain has its triumphs, that is enough, and every one admires, and has right to admire it.

The cabin dinner service is odd and queer, and wonderful for mixture of colors without harmony or contrast. There is a very rich dark blue abounding in the decoration which was never excelled at Worcester; but it looks lost in a chaos of pagodas and trees and houses painted in brick-red, and is singularly set off with touches of yellow. One might think the service was made by Mason at Lane-Delph but for the unknown mark, which is simply "Real Iron-stone China," under a large crown. Now, although this is not a remarkably rare service as pottery, it may serve as a text whereon to discourse a little in regard to table services in general. It has a history of its own, and that adds to its interest in the cabin among the mountains. I found it long ago in a second-hand shop, and paid the ignominious sum of eight dollars for the lot, some forty pieces remaining whole. When it was sent home, a servant recognized it as a familiar dinner service. "Ah, many's the dinner I've seen served on them dishes, sir."

"You have! Where?"

"Why, sir, didn't you know it yourself? That was one of Mr. ——'s dinner services."

And so it was; and that is what sometimes makes porcelain wonderfully curious to a man of imagination, though it does not materially add to its value for a collection. To think what dinners those were! What stories the plates could tell! Forty years ago there was no dinner-table in America around which a more brilliant company gathered. The host was a man of taste. He found these old brilliant colors, and they lighted up the board more than the richest porcelain with flower or landscape decoration. He was sensible enough to use iron-stone china for state dinners when it was what he admired.

There is perhaps less good taste displayed in our country in this matter of table services than in any other household adornment. Men who expend money freely in superb furniture, have grand drawing rooms and dining-rooms, rich glass and heavy silver dishes, exercise no sort of taste in the porcelain on which they serve their meals. It is very rare to see a set of porcelain which is out of the ordinary lines of French or English decoration for the market. Few know how easy it is to make a breakfast or dinner table bright and cheerful by selecting and varying the crockery

and china. I say crockery as well as china, for the great factories of the world make earthenware which is amply beautiful for royal tables.

A very simple rule for the guidance of those who wish to have their tables admired is to avoid, in successive courses, the endless repetition of the same service. Select sets of plates only, instead of buying full services. Have a number of sets of plates, and use a different set for each course. Then buy plates, no two of which are alike except in shape, and thus make harlequin services to vary the entertainment. The importers are always ready to supply such varieties. The most delicious after-dinner coffee services that eyes ever rested on can be made up by choosing the exquisite cups and saucers of Copeland, Minton, Worcester, or other English factories, in a dozen shades of color, making a collection which, when standing on a tray, is as gay as a bouquet of flowers. This idea of harlequin services seems to shock some persons, as if it were impracticable. But let them be assured it is the proper thing. In the old factories, Sèvres, Dresden, Berlin, Höchst, and in short in every first-class factory, it has always been customary to make costly services with no two plates or cups alike in decoration, except perhaps a border line. The most charming after-dinner coffee service that I have ever seen is a set of old Dresden and Sèvres cups and saucers, all of the same shape, but all differing in color and decoration.

It is not at all necessary that table pottery or porcelain should be old to be beautiful. Doubtless, as a general rule, old porcelain is more artistic in decoration than modern, and this proceeds from the fact that in the last century the artists who worked in the potteries were of a class who now seek higher pay than the trade can afford. Modern porcelain as well decorated, and as artistic as old, can be bought, but it is costly. Printing has come to such perfection that one can find abundance of really wonderful art in decoration at very low prices. And it must be a difficult taste to satisfy which cannot find among the cheap earthenwares of our day an abundance of color and decoration such as will meet the most fastidious demand, to say nothing of the superb work of Berlin—now the leading Continental factory—or of Copeland and Minton, who in all varieties, expensive and cheap, are surpassing the world. But it would be a great step in educating the popular tastes if we could expel from all tables, hotels, restaurants, and private houses the white stone-ware, cups a half-inch thick, and go back to such blue-and-white as almost every family in the country used forty years ago. The suggestion need not seem startling that a table would look well with a blue-and-white service of printed earthenware, representing a milk-maid at work among the cows, or the

impassable bridge on Turner's Caughley willow-ware, or the Victory on Lake Champlain, or the Landing of Lafayette at Castle Garden. The farmers' wives of New England and New York fifty years ago had, as a class, more good taste in table furniture than many persons in our cities now have; and any one who can procure a few of those old crockery plates may be proud to serve a course at dinner on them, and will win praise from all guests who have correct appreciation.

In the next place, let us talk of pottery and porcelain for decorative uses. Color adds cheer to rooms. Of course taste is to be exercised in the use of color, and some rooms may be so furnished that variety of color on the shelves and walls will be in bad taste. Such rooms are very rare. Wherever a picture can be hung, decorated pottery can be hung. Few pictures are to be had which so illuminate and gladden a room as paintings or bright colors on enamelled wares. These rich and gleaming decorations will often make a miserably furnished room look inhabitable and cheerful, and pottery and porcelain decorations are within the reach of all purses. It is not the most costly specimens that are the most decorative. Here the blue Staffordshire prints have a mission which they are well fitted to perform.

I once turned from a trout-stream to ask for a drink of milk at the door of a small farm-house in a lonely neighborhood. It was given to me with hearty good-will, in a dark-blue Staffordshire bowl, which, being praised, the farmer's wife confessed was not in common use, but had been taken from a pantry where it rested with the remains of an old service. The kitchen was somewhat ancient, its walls smoky, its general appearance dingy. When the good woman heard the praises of her crockery she brightened up, and expressed her affection for it, so that the natural thought of a lover of such wares was to suggest to her a way of making it useful and enjoyable. In two minutes a twist of wire had made a frame to hold a plate, resplendent with blue shells and roses, a dove in the middle, and it was hung on the wall above the mantel over the hearth. Two years afterward I fished the same stream, and asked for milk at the same house, and saw the kitchen fresh and bright, the hard-wood panels shining, and a dozen or more blue plates making it as superb with color as any city mansion.

It is unnecessary to consult a decorator about such adornment. Much that is very plausible has been said about the arrangement of faience and porcelain on walls. Exercise your own taste; and your taste, if not already good, will improve. A room will grow into order and beauty by a natural process, and plates and dishes will arrange themselves into fine

contrasts and combinations satisfactory to all good tastes, though possibly not quite agreeably to the notions of those who are bound by conventional rules of house decoration. There is a great charm in the freedom from uniformity, and the luxuriance of color, which can be exhibited on a wall decorated with plates and dishes, but it is a lamentable fact that few professional upholsterers or decorators have any conception of the proper uses of such color decoration. Hang your bits of beauty where you like to see them. Please yourself, and scout arbitrary rules which produce constant repetitions of a few conventional ideas, and make every room to look like every other. Listen to suggestions; accept advice; cultivate a teachable disposition; study effects of color and arrangement; never be confident that your tastes will remain any more steadfast than have the tastes of educated people in any country; but do not yield the delight of your eye because of notions of other people about harmony of colors or orderly arrangements.

Harmony for you is in your own eye, ear, and mind; and no other mind can make that harmonious to you, in the decoration of your room, which is not pleasing to your own taste. Perhaps you may be laughed at, but the chances are that you will set a good example to your friends by following your own free fancies.

Hang a beautiful object where you can see it. This is the first rule of wall decoration. Mingle your beautiful objects in whatever confusion you please. Change them when you like. Your notions of the beautiful will change from time to time, with conversation and the reception of new ideas. But if you attempt to follow arbitrary rules in arranging your pictures and pottery and porcelain, the chances are that you will never advance a step beyond stiff conventionalisms, and your rooms will maintain forever a cast-iron rigidity of color decoration.

The study of ceramic art and the collection of specimens, whether for cabinet purposes or for home decoration, should lead to freedom and independence of taste. The collector who follows the opinions of others, and guides himself by what others consider good in color or art, will get small good to himself by collecting specimens in any department. No man should admire the Apollo Belvedere because the world admires it. It must compel his admiration by its own power. Every man of taste and education should be free to consider the Transfiguration of Raphael the first picture in the world, as some think it, or to regard it as inferior to many, as others think it.

He who looks at works of art and enjoys them should, for the sake of others as well as himself, be independent of other minds in forming and

expressing opinions, and should not hesitate, whatever may be the taste and judgment of others, to regard the marvellous works of Turner as wonders of the highest art or as mysterious daubs. The decadence of art begins with loss of independence, and slavery to arbitrary rules which fetter it. The very life of the beautiful in all art is in freedom.

This subject opens up at once the question whether there is any permanent standard of the beautiful. Is there any fixed law of beauty, or is beauty purely and only a matter of notion, education, personal prejudice, fashion, custom? It is an old subject of difference of opinion, but the student of ceramic art in all ages, and all its styles, cannot avoid the conviction that there is no standard, and that in all matters of beauty, in art as in nature, the old proverb holds good, *De gustibus nil disputandum*, whether the taste be that of the palate, or the nose, or the eye, or the ear.

The first and strongest protest against this conclusion is aroused by the use of that word "ear." It comes from those who insist that in music there is a fixed standard of high art, and that to doubt or deny the superiority of this, that, and the other passage in the music of Mozart or Wagner, Beethoven or Chopin, is to write one's self down destitute of taste in music. We will not stop to discuss the subject. The claim of a few scores of people among the millions of modern civilization to be the sole judges of what ought to be admired in music, is too absurd to be discussed. What is called musical taste is a mere matter of education. We can grant all that is claimed as to the greatness of favorite composers and favorite operas, provided only it be remembered that this greatness is measured by a standard of to-day, and that a few years hence the standard may be changed, and the great musical works of this day may, and probably will, be regarded as poor stuff by the people who will claim then to be the only judges.

Very much the same thing is true of all works of art. No civilization can boast of superiority to that of ancient Egypt, and probably no nation that has existed since the days of the Pharaohs has been as highly educated. Yet if you could recall to life that long buried social system which shone with all possible brilliancy of intellectual culture in Memphis and Thebes three thousand years ago, and submit to it the works of Raphael and Domenichino, you would not find prince, priest, noble, or peasant who would give a silver ring or a lamb for the Communion of St. Jerome, or for the Seggiola or the Sistine Madonna. And why not? Surely not because they were not people of refinement and taste, but only because their standards were other than ours, and what we think beautiful they would not admire.

Or, again, if you could summon from his grave in the Pantheon the great Raphael himself to be foreman, and choose from among the giants in art a jury to try the issue, though Correggio, and Giulio Romano, and Guido, and Andrea del Sarto, and Murillo, and Albert Dürer, and Titian, and other mighty men of fame, of varied tastes and differing styles and standards, were on the panel, and to such a jury you should submit the issue, Are Turner's works high art or not? are Madrazo's pictures works of beauty? is Meissonier an artist of enduring fame and power? is this or that favorite of the modern schools a painter? the verdict would be unanimous against them all. And why? Not because the taste of modern connoisseurs is vicious and their judgment wrong, but only because the arbitrary standards of the cinque-cento period are not the standards of our tastes and times. If Raphael were painting to-day, he might possibly educate taste to his standard; but if he came unknown and unheralded by his old fame into the artistic field, he would not be estimated as highly as many modern painters; and Claude, painting as a new artist now, might not easily earn his bread.

This seems extravagant, when so many eminent writers insist on standards which they affirm to be everlasting standards in art. But these standards are pure imaginations. New styles, bold violations of old rules and conventionalisms, struck out by vigorous and daring artists, effect sudden and radical changes in popular taste, because they educate the taste; and this they do precisely as a great cook produces a new dish. Men might write volumes against the absurdity of liking roast lamb with mint sauce; but when a cook first served the abominable mixture, some one liked it, and it won its way, and no one can prophesy how many millions of dollars will be paid for the mint and the lamb in ages to come, or when the dish will be classed among the relics of barbaric taste.

Do not think this illustration degrading to art. It is a fair and good illustration, for the pleasure of the eye and the pleasure of the palate are alike free, and both refuse to be guided by arbitrary instructors. One may learn to like dishes that are at first disliked, and one may learn to like pictures that are at first displeasing. But no one can like a picture or a dish because Mr. A or Mr. B says it ought to be liked, or dislike it because Mr. C or Mr. D condemns it. It will do no harm to repeat here an illustration already noticed in an early section of this volume. To us and our modern taste black is a symbol of sorrow. When it became such is perhaps unknown. But it has become so by arbitrary taste. The old Greeks of the fourth century before Christ were one of the most accomplished races of men the world has known. Judged even by our own

standards, their civilization was of as high an order as ours. In architecture and sculpture we are proud of our approximations to their standards. Their literature is the study of our schools. But the Greek drank his wine at feasts from cups of brick-red or pale yellow, adorned with paintings in jet-black; and when art in Greece reached its culmination, he only changed them for cups of jet-black with pictures in brick-red. Who of our puny modern race shall dare to say that the builders of the Parthenon and the temples on the banks of the Ilissus lacked good taste, because black was with them a color of festal gayety?

Whether an object is or is not beautiful can never be a subject of discussion. No argument touches that question. It is a pure matter of assertion. For example, you stand before an object of art, or you hear a passage of music, and you turn to your friend and say, "It is very beautiful." (For we have gotten to affirming beauty of sounds as well as sights, and some people even talk of a beautiful odor, or a beautiful boat or horse race.) Your friend says, "No, it is not beautiful; it is wretched." There the difference between you may as well end, for no discussion will help you to agree. If you are sensible, you will say to yourself or to him, "It is beautiful according to the arbitrary standard which I have been educated to use, but it is not beautiful according to the standard he has been taught to apply, and each of us has perfect right to his standard."

I know a man who by birth, education, personal character, and ability is entitled to rank with any man in Europe or America. He lives in the mansion or palace in which his fathers have lived before him for more than seven hundred years, and his pedigree is stainless. He is a representative man, of a civilization not like ours, whose standards are wholly different from ours, to which civilization we Christians owe very much in all the arts, both useful and ornamental. He is an Arabian, of the blood of the Prophet. In his house is a wealth of beauty, even by our standards. There are walls whose arabesque decorations in enamelled pottery are superb. There are lattices by which the outer light enters through lace-like meshes of wood-work which are bewildering in beauty. But this accomplished gentleman, and his friends, men of Oriental culture, prefer the nasal drone of the Arabian vocalist to the songs of the prima donnas who successively reign in the Khedive's new opera-house, and would not give a piastre for the finest paintings on the walls of all Italy. Not because they are not men of taste and refinement, nor because their music and decorative arts are better than ours, but because their standards of beauty are arbitrary, precisely as are ours. And who are you or I that we should assume higher powers of judgment, and assert the superiority of

our standards of taste over that civilization to which almost every decorated church and private house in New York owes more or less for the most effective designs in color? I can imagine a critic undertaking to teach those men what constitutes true beauty in art!

I have lingered on this subject, because it is of the highest practical importance, especially in America, where as yet we have no characteristic art. Independence of taste and judgment is the right and the duty of the American student, and lover, and patron of art. Hitherto we have been content to follow guides, adopt established tastes, buy what of the beautiful bears the stamp of European approval, judge our native work by rules prejudged and determined in other countries. The time is surely at hand when there may arise American schools of art, and it may well be hoped that they will rise with freshness, vigor, individuality, and independence. If Grecian schools of art had adopted the rules and tastes of the Phenician schools, the glory of the Phidian age would never have shone through all the centuries.

But let us pass on to a practical portion of the subject. We were speaking of wall decoration. How to hang a pottery or porcelain dish on a nail is a puzzle to many. Round frames are easily made of wood to hold costly and fragile pieces. These should be of no color as bright as the color on the pieces. Gilded frames are rarely suitable. A plain dark color is generally the best, and leaves the enclosed object more conspicuous.

Clasps or light frames of tin are sold which are equally secure. But any one can, with a piece of brass or copper wire, make a holder, with three or four ends turned over the rim of a plate, which will hang it safely. Here is a pattern of a holder (Ill. 299) which I have invented, and which any village can find a workman to make, which costs but a trifle, and which, since it was invented, has led to the hanging of many hundred beautiful plates formerly reposing in dark closets.

It consists of two pieces of annealed brass-wire, the size of the wire varying according to the weight of the dishes to be hung. A quite small wire is used for plates of dinner size. The ring and the two lower arms are one piece of wire, twisted together for three inches, more or less, below the ring. The two upper arms are one piece of wire, wound in the middle in a spiral cylinder, just large enough to slide freely up and down the twist of the lower arms.



299. Wire Frame to hang Plates.

The play of

three inches determines the extremes of size, in dishes, which this frame will hold; and, of course, other frames can be made for larger or smaller objects.

Bend the four arms to fit the shape of the back of the plate; fit the lower loops on the rim; slide the upper loops down to clasp the rim, and tie them tight with a bit of string. The plate can then be hung, no part of the wire being visible except the ends which clasp the rim.

And now to speak of cabinet collections. Within a few years many persons in America have commenced the formation of these, and not a few collections exist in private hands which are of great value, beauty, and interest. The formation of a small collection of pottery and porcelain in this country is not a difficult, though it may be a slow, process. But it is vastly better that a collection should grow slowly in the hands of a student of art, than that he should acquire numerous specimens at one time. It is not only a greater pleasure, but it leads to closer study, to gather piece by piece. Many errors will naturally be made. Specimens which the collector fancies rare will turn out, after resting awhile in the cabinet, to be of small account. Experience will cost something: it is always worth more when well paid for. But if the collector is guided by his love of the beautiful, instead of a desire to possess rare varieties, his experiences will be less costly and the benefits resulting will be greater.

America is much richer in good works of old art than is ordinarily supposed. Many families of respectability, education, and former wealth came to this country in the seventeenth and eighteenth centuries, bringing with them more or less of their household treasures. Americans have been for a century past extensive travellers, and have brought home much of the artistic work of various countries. Bric-à-brac shops are, indeed, unknown here. There is not one, so far as we know, in America, which can be properly so called. But they will soon appear, and the country will supply them with abundance of bric-à-brac. When our legislators are wise enough to appreciate the educational value of works of art, and to see that no principle of protection is involved in admitting duty free all articles manufactured more than fifty years before the date of importation, we may reach the end of the present barbarism which places a duty on old armor, old porcelains and potteries, old engravings, paintings, and other art products. This duty at present forbids the American collector to compete with Europeans at auction sales in Europe, and especially excludes the rarest and most important examples in all departments of art; for these are more costly because of their greater educational importance, and the American *ad valorem* duty is greater precisely in proportion to

the educational value of the article. Private collection is essential to the formation of public museums. The latter grow rich only by absorbing private gatherings.

I have an object to accomplish, in this free talk with my reader, whom I believe to be a lover of art and willing to aid in this purpose, and I am therefore persistent in directing his attention to it.

I have said that bric-à-brac shops are unknown here. They form no unimportant part of the commercial business of other countries. When European bric-à-brac can come to us to be sold, hundreds of women will find in our large towns pleasant and profitable business, and then the articles already in America, now going to ruin in garrets and closets, will be gathered where collectors and museums can obtain them. Every European town of a few thousand inhabitants has more or less such shops. It is an important industry, not alone to those who keep the shops, but to those who have articles worth selling, and who need the money they will fetch. With permission to import articles of vertu, we might hope to see American dealers purchasing them in European markets, and American travelers, no longer fearing the annoyances of custom-houses, bringing home with them illustrations of beautiful art, which will first be the delight of local circles of friends, and finally gravitate into public museums.

I have no hesitation in begging the intelligent reader, man or woman, to use personal effort in this behalf, to the end that at least works of *old art* in all departments may be admitted duty free. Those who are not familiar with the subject from sad experience have no idea of the impediments which a custom-house places in the way of importing small art treasures, and this in spite of the most courteous officers, and a hearty desire on their part to facilitate the process of importation. My own sorrowful experience would, if recited, move the compassion of all lovers of beautiful objects. Once a custom-house carpenter, in reclosing a case of rare glass from Germany, drove a long nail through a priceless specimen, whose cost and value were greater than that of all the other objects in the case, and the replacement of which was impossible forever. Another case, containing carved wood from Italy, was reclosed without restoring the interior guards and packing; and on the Government cart, in the streets of New York, every object in the case was more or less damaged, and several pieces were totally destroyed. I say nothing of the melancholy disappearance of beautiful things, leaving no fragments to be mourned over. One cannot say how these disappearances occur.

Nor does the provision of our law admitting "cabinet collections of antiquities" duty free in any manner aid us, since the Treasury Depart-

ment has made two interpretations of this provision, substantially annulling it. The Department has decided that the provision was not intended to apply to private importations, and that "antiquities" are to be considered as distinct from "modern" and "mediæval" products, neither of which last two can be admitted free. The technical distinction between ancient and modern faience and porcelain has been long established as after and before the beginning of the nineteenth century. It is so defined in all the scientific books. But our present system classes antiquities in ceramic art as only the Egyptian, Phenician, Greek, and Roman; and a glazed Norman vase, or a Saracen tile of the fifteenth century, or an Italian majolica dish, or an old Sèvres plate, is subject to a duty equal to about one-half its cost—not its intrinsic value as pottery, but its educational value and cost as an illustrative specimen of art. It is, of course, clear that the American collector who desires to purchase at European auction sales cannot compete with European bidders, since he must add the heavy customs duty to the price he pays for his specimen.

Americans are noted for their abundant willingness to purchase costly articles in Europe. They will outbid all other purchasers in an open market, and America would become rapidly wealthy in examples of art industry but that the market is closed by our own laws. In plain money terms, this is the case: A lot of specimens of old faience and porcelain is valued by European experts at £1000. A "foolish" American, who wants the beautiful objects more than his money, is willing to give that, or even £1250, for them. But if he bids £1000 and buys them, they will cost him, delivered at his home in America, £1500; and if he gives £1250 for them, the cost will rise to £1875. A German, Frenchman, or Englishman, of course, gets them for £1000, for there is no duty on them in any European custom-house.

It is surely unnecessary to say that the question of protection of home industry is not involved in this subject. The solitary argument which has been uttered in favor of the existing law was the sweeping assertion of a senator, in reply to several public institutions and private citizens who asked a modification of the tariff on this point, that "it is only rich men who want to buy such articles, and the revenue wants their money." On the contrary, not alone a few rich men want the articles, but thousands of citizens of moderate means desire to possess them, and to gather them in cabinets; and every thinking man wants them to come to America, where they will, in time, fall into the possession of village, town, and city museums, to become, as we have elsewhere in this volume shown clearly, of inestimable importance to national wealth and industrial production.

The American collector is for the present confined to such articles as are now here. The old potteries and porcelains which are most abundant in America are, of course, those which were imported for domestic use in the last and present centuries. Among these were many of great beauty, which would be treasures in any collection. They are chiefly Chinese, Japanese, and English wares. Of the Chinese porcelains of the last century, great quantities were imported after the close of the Revolutionary War. The blue-and-white is generally of ordinary character; but many polychrome services of the manufacture of the time of Thang were brought out, either by merchants or by ship-masters, for special gifts, and specimens of much beauty are to be found in the possession of American families.

Besides these, many exceptional pieces of the rarer old Chinese wares have found their way to America within the past century, and are sometimes met with in the most unexpected places. Bow, Chelsea, and Derby contributed very little to American home furniture in the last century, but the remains of occasional services are met with. Wedgwood wares are frequent. Lowestoft porcelain is more common than any other. It seems to have been very largely exported hither, and three families out of four who had porcelain at the beginning of the present century were supplied with that ware. Next to this in quantity we have found the New Hall. It abounds in old houses, and very beautiful specimens are not uncommon. Turner's Caughley wares were sold to America in considerable quantity, both porcelain and pottery, but in general of the more ordinary class. His pottery with blue printed decorations is often well worth preserving. Cream-colored wares and salt-glazed stone-wares of the latter part of the last and beginning of this century are abundant in America; and of the latter, many very beautiful and quaint old specimens are to be found, moulded with good reliefs, colored and plain. It is generally impossible to say at what factory these were made, but that is of small consequence. The old teapots, graceful in form, well decorated, queer and ancient in their very aspect, with borders of green leaves embossed, bouquets in colors, orange bands—odd combinations, but pretty withal—are not to be despised as works of art, nor, when collectors begin to appreciate them, will they be found sufficiently abundant for all. Castleford teapots, with pretty relief lines in blue, or with well-executed medallions, are quite often found in old houses.

The printed wares of England, from 1810 to 1825, were very largely sold to America, and collectors here should not fail to gather specimens. Staffordshire potters, especially Clews, of Cobridge, the Ridgways, Enoch

Wood & Sons, Rogers, and Riley, found an American market, and sent not only their regular patterns, but produced a great many special patterns of American subjects. The common notion that these printed wares are valueless crockery leads collectors to neglect them. They are becoming more and more rare, and will soon be highly prized. Some of them are wonderfully good specimens of color.

I have mentioned these as the old wares most frequently met with in American houses. It may, perhaps, be said that, as a general rule, an American family accumulates a greater variety of porcelains and potteries than a European family. This is due to the fact that Americans have always purchased in markets supplied from various manufacturing sources. For example, I know an old family whose porcelain and crockery, which has come into the possession of the family by inheritance, includes services in Chinese, blue-and-white and polychrome, Japanese, Bow, Lowestoft, Worcester, and New Hall porcelains; and Jackfield, Liverpool, Cobridge, Shelton, and some other potteries. Thousands of American houses have similar pantries, containing specimens of other and a great variety of fabrics. I have purchased good specimens of old Sèvres and Rouen from French families in this country; of Dresden, Höchst, and other German factories from German families.

The frontispiece to this volume shows the decorative value of a few old plates. It is not a fancy sketch, but a photographic copy of the fireplace and chimney in a room in an old New England country-house. The mantel is of plain wood, in old style, without ornament, and the excellent taste of a lady who loves art has made it brilliant with enamels. We only regret that we cannot give the colors to exhibit the charming effect. The tiles which surround the fireplace are blue-and-white, decorated in quaint old patterns at Delft, except the corners, which are Venetian. Above them hangs a row of five ancient blue-and-white Chinese and Japanese plates, of various patterns, all superb in color. On the mantel stand from time to time such ornaments as suit the taste or the mood of the lady. To-day there are two old square bottles of Chinese porcelain, a pair of Sèvres cups of very delicate work, a drug vase of Italian majolica, and two tall vases of German glass, graceful in shape and rich in color. On the wall hang both paintings and plates. The paintings are water-colors, which generally harmonize better than oil-paintings with enamels. None of the plates hanging here are painted with subjects. It is not often that pottery or porcelain with subject paintings can be hung with other paintings. But each of these plates is a gem of color. The lower one of the three in the middle is a wonderful piece of old Jap-

anese splendor, a wild intermingling of every color known to ceramic art, in leaves, flowers, and emblematic designs around the arms, or insignia, of a prince. Above it is a plate of "*porcelaine des Indes*," which might be mistaken for Lowestoft, and above this a large Delft dish. The plate at the right is by Wedgwood, and (a rare occurrence) on its back is the name of the person for whom the service was made—a New Englander of the last century. There are some very rare and very beautiful ceramic treasures in cabinets on the other sides of the room; but this chimney is important to our purposes, as well as beautiful, for many of the plates are representatives of old services in the family, and all the specimens here visible, including those on the mantel, excepting only the Venetian tiles, were obtained in this country. There is no one specimen which for beauty and decorative effect is not worth much more than its weight in silver.

It is a very easy matter for any one, with patience and taste, thus to make a room brilliant, cheery, and full of bright thoughts. There is probably no New England village, dating its settlement from the last century, which could not furnish material for many such decorations.

One or two personal incidents will serve to afford encouragement to the American collector. Some years ago an aged German gentleman in New York, about to return to Europe, asked me to call at his house and examine, with reference to purchasing, a small collection of porcelain, which he had formed in his youth in Germany. The result was the acquisition of some delicious figurines of Dresden, Frankenthal, Ludwigsburg, and notably several beautiful works of Melchior at Höchst. These formed a cabinet collection purchased for that purpose. But when about to take my leave, I jocularly asked the wife of my old friend if she also had not some china in her pantry to sell. She replied, with a laugh, that she had plenty of old crockery, but not of a sort any one would care for. Would she show it? "Certainly." And in a few moments a servant covered the floor of the room with Fürstenberg porcelain, Niderviller faience of Beyerle's time, Delft dishes, large and small, decorated in queer old patterns, Leeds pottery baskets and dishes, Wedgwood cream-ware, an old Chinese dish of great beauty, and a miscellaneous lot of other specimens.

Driving through the country in pleasant Octobers, we have sometimes found our way into pantries of old houses, and not always without reward. Chatting on the portico of a village inn one day with a man who seemed to know the neighborhood, we heard the family histories of most of the inhabitants, and, among other things, the account of a house out of which the old folks had died, and which the young folks were refurnishing. "What did they do with the old furniture?" "Put it all in the garret."

"Why not sell it?" "Who to? They'd be glad enough to sell it if anybody would give anything for it." "Could we see it?" "I s'pose so. If you want to look, I'll go and ask him." The result was a visit to the garret, not far away. It was a wonderful place, that garret. The house was old, the family one of property and position for nearly two hundred years. The garret contained piles of ancient furniture, and a wreck of pottery and porcelain that was sad and solemn in the eyes of a collector. Old blue-and-white Chinese wares were literally trodden underfoot, for the floor was covered with fragments of an immense service, crushed into thousands of pieces, and mingled with the similar relics of an old English cream-ware service delicately painted. Out of that wreck we rescued in good order some rare Chinese plates with polychrome decorations, the Liverpool mug with portrait of the Honorable John Hancock, elsewhere illustrated, a good old Wedgwood cup and saucer, and a few other pieces of English fabrics. The want of a bric-à-brac shop in the neighborhood had led to the destruction of much good porcelain in that garret, where it was treated as worthless trash.

These are not uncommon incidents. We have found fine specimens of Rouen, Nevers, Delft, Dresden, Sèvres, Bow, Derby, and many other factories in New York "second-hand" shops, and no country in the world presents better opportunity for the gathering of Chinese and Japanese wares of polychrome decoration, which are fully as interesting and beautiful as any other class.

A word of advice to the beginner who is gathering specimens. It should not be necessary to give such rudimentary advice, but the experience of every collector who is consulted by beginners will confirm its necessity. Your first question, in examining a specimen, should be, "What is it?" Determine the material first of all. Is it pottery or porcelain, hard-paste or soft-paste? Hold it up to the light. If it is thick, use a strong light. Endeavor to see the shadow of your fingers through it. If any light comes through it, it is porcelain. Do not be hasty in deciding. Many colored porcelains and many thick porcelain pieces are nearly opaque. If it be porcelain, next determine whether it is soft-paste or hard-paste. Your touch will need experience before you can depend on it. If permitted, try the bottom rim with a file. If the glaze covers the bottom rim, it is probably soft-paste, but this is not always the case. The determination of the character of the ware is preliminary to looking at the mark, if there be one on the piece. Consult the Tables of Marks in this volume for the meaning of any mark you may find. Perhaps it will not be in the Tables. No index of marks is yet complete. Every year

adds information on this subject. Nor are the marks of very modern factories given here, except in connection with ancient marks of the same factory. Experience will soon teach you to recognize most modern colors and styles as distinct from the old. Do not ask an experienced collector for information about a piece, unless you show it to him, or can give him an exact description, stating the material and the definite characteristics of the specimen, with a fac-simile of the mark, if there be one, and a copy of the decoration, if it cannot be clearly described in words.

Let us now talk about the cost of specimens. The value of old pottery and porcelain depends on many circumstances. The rivalry of collectors, and the temporary run on certain factories, whose works it is, for the time, the fashion to collect, may change entirely the auction prices. Specimens of Bristol, Dresden, Chelsea, Sèvres, China, Worcester, may be at one time sought, and the prices rise; a year or two may change the mania, and the prices fall. But fine artistic works, of whatever fabric, have always a tolerably well-maintained value. In America prices are wholly unestablished, and in general absurd. The few dealers who sometimes sell old china do not profess to much knowledge of the subject, and fix prices which are ridiculously cheap on some articles and ridiculously dear on others. We have seen an ordinary specimen of a common German factory worth a dollar or two marked \$15, and by its side a beautiful Sèvres déjeuner service of 1782 decorated by Baudouin, with factory and artist's signatures, priced at \$12.

In general, however, the American prices are much higher than the value of the articles, for the reason that dealers, and too frequently purchasers also, value specimens because of factories, and not because of their artistic merit. The mere presence of an old Worcester, Dresden, or other mark is thought to make any specimen highly valuable. A little common-sense advice may do good. Antiquity adds nothing to the value of a specimen unless it has some historical or artistic value apart from its age. Beautiful art, of whatever factory the product, is valuable. Beautiful art of rare old fabrics is more valuable because such specimens are sought. But a beautiful work of an uninteresting factory is worth more than a poor work of a renowned factory. Specimens of common products of Sèvres, Dresden, Capo-di-Monte, Chelsea, and other celebrated factories are desirable, in large collections, as illustrations of ordinary commercial work. But in small private collections the wares of the most renowned factories are valuable only when they are specimens of beautiful work.

The value of Italian majolica depends wholly on the merit of the pieces. A rapid rise in the prices of these fabrics has occurred within a

few years, since they first began to interest collectors. Specimens sold by auction for £10 a few years ago became worth £100. High prices, however, are paid only for works of high art. The range of prices is from £1 to £100, exceptionally fine specimens only bringing the latter price, and a very few exceedingly rare and fine pieces bringing whatever higher prices the desire of collectors may lead them to pay. The large majority of specimens are not the high-priced; few are worth £50, much fewer worth £100.

The prices of Faience d'Oiron are limited only by the fancies of collectors. The specimens of this ware known are all catalogued, at estimated valuations ranging from £100 to £1500.

Extracts from a few catalogues of recent sales in England will show the range of prices of some wares, and the great variation. It is difficult to obtain an idea of the real value of articles from such catalogues, without personal inspection of the objects. Condition, color, quality of decoration, the presence or absence of a mark, numerous unexplained circumstances, vary the prices. These extracts will suffice to show the collector that much caution is needed in purchasing expensive pieces, different examples of the same piece (such as a Bow milk-jug with the bee) bringing very different prices, according to condition, quality, and the circumstances of the sale.

PRICES OF SÈVRES: BERNAL SALE, 1855

In March, 1855, the collection of works of art of the late Ralph Bernal, Esq., including a large amount of pottery and porcelain, was sold at auction in London. The prices obtained for Sèvres wares were supposed to mark the highest limit which they would be likely to attain, and the prices of fine specimens of such kinds as are more commonly met with have not materially advanced; while *vieux Sèvres* vases of fine character have since that date advanced enormously.

	£	s	d
Cup and saucer, blue-ribbon border, roses in compartments	5	5	0
“ “ apple-green, exotic birds in compartments	7	17	6
“ “ gros bleu, with Cupids	17	17	0
“ “ green, Venus chastising Cupid, and a dog, in landscape.	26	0	0
“ “ two children, etc., painted by Leguay.	22	1	0
“ “ green, figures, etc., painted by Chabry and Merault	55	0	0
“ “ gros bleu and green, with Cupids	18	11	6
“ “ gros bleu and green, children, painted by Viellard	27	6	0
“ “ turquoise, exotic birds	9	9	0
“ “ gros bleu, figures in landscape, painted by Chabry	32	11	0
“ “ gros bleu, nymph reposing, painted by Chabry	6	6	0
“ “ Rose Du Barri, landscapes, 1757	22	0	0
“ “ white, Cupids in blue, painted by Dodet, 1768	19	19	0
“ “ gros bleu, exotic birds	4	4	0

	£	s	d
Cup and saucer, deep-blue borders, wreaths of roses	5	0	0
“ “ gros bleu and gold, seaports and figures, painted by Morin, 1770.	95	0	0
“ “ jewelled, gros bleu, medallion portraits suspended from gold wreaths, ruby and pearl border above, painted by Leguay	80	0	0
“ “ white, peasant-girl, etc, in landscape, painted by Noel	54	12	0
“ “ gros bleu, two soldiers carousing, painted by Morin, 1772	160	0	0
“ “ gros bleu, groups of Oriental figures, painted by Leguay	107	0	0
Euuelle, cover and stand, gros bleu, six subjects of Cupids, painted by Chabry, 1771	125	0	0
Plate, gros-bleu border, white spots, exotic birds, flowers in centre	4	15	0
“ turquoise border, flowers and grapes	2	15	0
“ green border, medallions of birds, flowers	3	18	0
“ borders imitating Limoge enamel, figures and arabesques	3	5	0
Vase, handles goats' heads, gros bleu, medallion of Fame recording events of Time, bouquet of flowers on reverse, mounted on plinth, 14 inches high (bought for £17)	127	1	0
Vase, gros bleu, Venus, Adonis, and Cupid, painted by Pavon, 16½ inches high	223	13	0
Vases (a pair), gros bleu, pencilled with gold stripes, medallion of sacrifice to Venus and Bacchus, mounted on ormolu plinths, 14 inches high	700	0	0
Vase, gros bleu, richly ornamented handles and festoons of leaves raised, medallion painted with a peasant and girls gathering cherries, a donkey, etc., in landscape, group of flowers on reverse, 18 inches high	871	10	0
Vases (a pair), gros bleu, handles ornamented with foliage, resting on masks, paintings by Gremont, nymphs at a bath; on reverse, flowers, fluted stems, square plinths, 15½ inches high	900	0	0
Vases (a pair), Rose Du Barri, groups of Cupids in medallions, 14½ inches high	1942	10	0
Vases (a pair), turquoise, medallions of a shepherdess with sheep and a dog, and a girl bathing her feet, 18 inches high	1417	10	0

Later sales have indicated a great increase in the passion for *vieux Sèvres*. At Mr. Angerstein's sale, three green jardinières and stands, with pastoral figures after Boucher, and fruit and flowers, brought 475 guineas. At Lady Truro's sale, three eventail jardinières, white and green ribbons, with Cupids, date 1757, brought 1750 guineas. At P. Solomon's sale, a cup and saucer brought 81 guineas, another 105, another 110, and another 140 guineas. At Captain Rickett's sale, a bleu-de-roi vase, 16½ inches high, painted with figures fishing, brought 1350 guineas; and a cup and saucer, with Chinese figures, £161.

PRICES AT SALE OF THE COLLECTION OF A. MORSE, ESQ, LONDON, MARCH, 1876.

Bow :	£	s.	d.
Figure of Winter	5	7	6
Two dogs in an arbor	2	10	0
Milk-jug, form of two goats, bee in relief	3	5	0
Figure of Neptune, 9 inches high	8	15	0
Butter-boat	0	18	0
BRISTOL :			
Pair of butter-boats, embossed and painted with flowers	4	15	0
Mug, flowers and insects	6	0	0
Pair of figures, shepherd and milkmaid	126	0	0

		£	s.	d.
CHELSEA :				
Pair of pastoral figures		12	15	0
Figure, Romeo, 12½ inches high ..		27	0	0
“ Milton, 12 inches high ..		8	10	0
Pair of figures, pedlars		52	0	0
Teapot, flowers		1	5	0
Coffee-pot, flowers		3	15	0
Cup and saucer, gold and flowers ..		3	9	0
Plate, flowers		2	0	0
Fruit-dish, fruit, flowers, insects ..		3	15	0
Figure, girl by urn, 8½ inches high ..		6	0	0
Vase, florid rococo style, raised flowers, medallions of Cupids		25	4	0
CHELSEA DERBY :				
Four figures, Europe, Asia, Africa, America, 13 inches high		74	11	0
DERBY :				
Plate, medallion of hunting subject		2	4	0
Cream-ewer, helmet shape, gold and blue ..		0	15	0
Vase, 18 inches high, landscapes		11	0	0
Vase, medallion, birds		2	0	0
Cup and saucer, flowers ..		0	9	0
Pair of vases, mask handles, bird		3	3	0
PLYMOUTH :				
Pair of groups, Cupids and goats, 8 inches high		28	7	0
Open-work basket, white, with raised flowers		4	0	0
Salt-stands, pair, encrusted with shells		6	16	0
“ “ rustic groups, foliage, etc.		42	0	0
SWANSEA :				
Cup and saucer, flowers		2	0	0
Plate, large bouquet		5	5	0
Pair of plates, fruit, flowers, birds ..		2	15	0
WORCESTER :				
Mug, parrots and fruit		0	15	0
Two cream-jugs, Chinese figures, etc.		0	7	0
Pair of coffee-cups, print, garden party		2	15	0
Cup and saucer, flowers in blue ..		1	5	0
“ “ turquoise borders, flowers		3	12	0
“ “ green border, flowers		1	5	0
Mug, turquoise border, flowers, etc.		5	15	0
Two plates, blue and gold border, birds		6	10	0
Teapot, salmon-scale ground, medallions of flowers		5	15	0
Cup and saucer, salmon-scale ground, medallions of flowers		3	3	0
Mug, Hancock print, Marquis of Granby		5	5	0
Half-pint mug, Hancock print, birds		3	14	0
Jug, 8 inches high, exotic birds, square mark		36	0	0
Five cups and saucers, blue, crescent mark		1	17	0
Mask jug, blue and gilt, crescent mark		3	15	0
Plate, birds and insects in compartments, square mark		14	0	0
Plate, print, the garden party, square mark ..		2	5	0
Six mugs, blue, crescent mark		4	8	0

WORCESTER, continued

	£	s	d
Two mugs, blue, crescent mark	1	0	0
Jug, 9 inches high, mask lip, canary ground, painted flowers and insects, panels with prints	37	10	0

MISCELLANEOUS

Pair of New Hall plates.	1	16	0
Pair of plates, roses and gilt, signed <i>Rose Coalport</i>	2	0	0
Spode vase, landscape in lake.	1	2	0
Spode basket, beautifully painted view in Surrey	2	0	0
Two Pinxton mugs, landscapes	1	10	0
Battersea enamels, boxes, etc., from £1 to	2	6	0
Capo-di-Monte, white group, lovers	6	6	0
Dresden group, lovers	13	13	0
Another Dresden group	16	0	0
Wedgwood & Bentley vase	10	5	0
Another, black ware	3	17	6
Wedgwood medallion of Napoleon	1	0	0

SALE OF COLLECTION OF PHILIP P COTTER, ESQ, LONDON, FEBRUARY, 1875.

Bow :

	£	s	d
Cream-jug, goats and bee	25	10	0
Cup and saucer, pine-cone surface	3	15	0

BRISTOL :

Two cups and saucers, blue	1	1	0
Cup and saucer of the celebrated Champion-Burke service	83	0	0
(One sold at the Walker sale for £90, and at Edkin's sale for £93)			
Two figures, shepherd and shepherdess	31	16	0
Figure of Spring, white (engraved in Owen, Plate XI.)	54	0	0

CAPO-DI-MONTE .

Cup and saucer, with Triumph of Neptune and Rape of Proserpine in relief	22	10	0
Another, classical subject	7	10	0
Another, later period	3	3	0
Group, a satyr and Cupid on a goat	2	2	0

DERBY :

Four figures, 'the Elements'	31	0	0
Pair of groups, mother and child, and Doddridge and his mother	20	0	0
Vase and cover, views and river-scenes in sepia	3	12	6
Turquoise vase, birds	5	10	0

DRESDEN :

Cup and saucer, Marcolini, gros-bleu ground, nymphs after Angelica Kauffman	14	0	0
Cup and saucer, subjects after Watteau	8	5	0
Teapot, landscape in pink	1	15	0
Cup and saucer, landscape and seaport	1	18	0

PLYMOUTH :

Mug, gold chain border, exotic birds in a landscape	41	10	0
Another, smaller, birds in landscape	7	5	0

NANTGARROW :

Plate, impressed borders, in centre flowers	4	4	0
Pair of vases, blue, flowers by Pardoe	6	10	0

MISCELLANEOUS :	£	s.	d.
Sèvres cup and saucer, Venus and Adonis, by Taillandier.	7	10	0
St. Cloud cup and saucer, Trou's mark.	1	6	0
Tournay cup and saucer, battle scenes.	4	6	0
Menecy sucrier, landscape and river scenes.	7	5	0
Vienna plate, Eneas and Dido, gold and floral border	18	0	0
Vienna cup and saucer, rose ground, nymph and Cupid.	8	0	0
Herend tankard, serpent and lizard handles, perforated, and enamelled in colors	11	0	0
Worcester hexagonal vase, salmon-scale ground, exotic birds, square mark	158	0	0
Worcester oviform vase, blue, birds and plants in Japan style, square mark	32	0	0
Cup and saucer, bouquets, Dr. Wall's mark.	13	15	0
Cup and saucer, gros bleu, animals in rich gold borders, square mark.	20	15	0

At this sale, among other property, six plates, gold borders, painted with plants, marked "Leeds pottery," brought £2 4s.; Chelsea groups brought from £3 to £29.

SALE OF COLLECTION OF DR. F. GIBSON, LONDON, MARCH, 1877.

[This collection was exclusively fine old Wedgwood ware.]

WEDGWOOD :	£	s.	d.
Thirty-seven medallions in black basaltes, Roman emperors.	15	4	6
Erasmus, black basaltes medallion	4	4	0
Others in same ware, from £1 to	2	2	0
White biscuit medallion of Thomas Bentley.	5	0	0
" " Sir William Hamilton.	4	10	0
Others, from £1 1s. to	1	17	6
Blue jasper medallions, by Wedgwood & Bentley, of Sully, £6 6s.; Palæologos, £7 17s. 6d.; Dr. Franklin, £12 12s.; Admiral Keppel, £8 18s. 6d.; Captain Cook, £15 15s.			
Blue jasper medallions, by Wedgwood, of Shakespeare, £16 16s.; Garrick, £17 17s.; Reynolds, £9 9s.; William Franklin, £5 15s. 6d.; Josiah Wedgwood, £10 10s.; Benjamin Franklin, in fur cap, £11.			
Venus Callipyges, medallion oval, white on purple.	15	15	0
Flora, the companion oval.	18	18	0
Apollo and the Muses, ten oval blue-and-white plaques.	79	16	0
Twenty-three medallions in a frame.	94	10	0
Eighteen medallions in a frame.	99	15	0
Thirty-seven medallions in a frame.	115	10	0
Blue jasper flower-pot, reliefs	7	7	0
Blue jasper vases, £8 18s. 6d. and.	10	10	0
White biscuit bust, Voltaire.	28	7	0
Oviform vase, pale-blue jasper, white reliefs.	90	6	0
Oviform vase, blue jasper, white relief, Hercules in garden of the Hesperides, 14 inches, by Flaxman.	120	15	0
Another, similar, by Lady Beauclerc.	100	16	0
Companion to last.	105	0	0
Head of Medusa, medallion, blue-and-white jasper, 5½ inches diameter, by Wedgwood & Bentley.	52	10	0
Plaque, Apollo and four Muses, blue-and-white jasper, 15½ × 6½ inches, by Flaxman.	131	5	0
Companion plaque, Muses	131	5	0

WEDGWOOD—continued :

	£	s.	d.
Offering to Peace, by Flaxman, $10\frac{1}{2} \times 3\frac{1}{2}$ inches	99	15	0
Achilles dragging body of Hector around Troy, $18\frac{1}{2} \times 5\frac{1}{2}$ inches	121	16	0
Priam begging body of Hector, $15 \times 6\frac{1}{2}$ inches	136	10	0
Other plaques, £44, £46, £98, £25, £19, £50, £5 5s			
Vase, black jasper, reliefs in white, Apotheosis of Homer, head of Medusa, Pegasus on the cover, other rich relief ornaments, 25 inches high with pedestal, on which sacrifice to Flora and to Cupid, etc	735	0	0

It is quite impossible to give the collector any definite information of the value of Oriental porcelains without the presence of examples. A slight variation in the shade of color in a blue, or red, or other specimen makes a vast difference in its rarity. Fashion among collectors, also, controls the prices of Chinese and Japanese wares more than those of any other fabrics. Old blue-and-white is now much sought, and very costly if fine. Nor is there any established rate of prices. In the Centennial Exhibition at Philadelphia (where very few good specimens of old Chinese ware were shown), we saw in the Chinese department a vase of a rare shade in blue marked as "sold" for one hundred and fifty dollars, and on the same day a much finer specimen of the same shade offered in a dealer's window for seventy dollars. There are specimens of Chinese color which are excessively rare, and the makers did not exaggerate when they compared them to gems. These are costly, and worth whatever the admirer can persuade himself to give for them; for to possess these specimens of enamel color is worth more than money to one who has money to expend. They are unfading beauties. Such are some of the blues, and some rarely seen specimens of iridescent liver-color. But among European dealers I have found the prices of even the most rare colors varying fifty per cent. in shops, and almost never approximating to uniformity in different cities. The collector must therefore be left to bargain with the dealers for Oriental porcelains, and to bid at auction sales, just according to the force which his admiration of an article exerts on his purse.

The prices which have been quoted will serve to show the American collector the great difference in the estimated value of different works of the same factories. This, as in all other classes of art, is a mere question of the merit of the work. An old Sèvres cup and saucer may be worth one pound or a hundred and fifty pounds, precisely as a piece of painted canvas may be worthless or priceless.

It would be quite useless to enter into discussion with lovers of painting who think that there is no possible merit in decorations on enamels considered as paintings. This is a pure question of taste and education, and we who admire the work of some artists on pottery and porcelain

have as good right to our preferences, and as ample justification of our expenditures, as they who buy canvas and panel. I have flower paintings on porcelain which I would not exchange for any canvas I have ever seen ; nor would I part with some heads and subjects in miniature, on Dresden, Sèvres, and Capo-di-Monte, for any miniature work that I have seen of any artists on ivory, paper, or panel. My friend laughs at me, and points to his gems of modern European art as the illustrations of a correct taste in paintings. And I laugh at him, pitying his inability to appreciate what I admire, and so we are even. And both are right, for both love the beautiful in different developments.

If art study be guided aright, with deference to the varying tastes and the different constitution of men's minds, with hesitation in forming opinions, but independence and firmness in opinions when formed, it will have perhaps a greater influence on personal character than any other ordinary study. As the more men know in general, the more they appreciate their own ignorance, so increased knowledge of art history and the study of examples makes men more teachable, increasing constantly that humility which regards great artists and great works of art as masters and books from which we are to learn, and not as objects of ignorant discussion and criticism.

The judicious student will keep in mind the truth that every work of art is an embodiment of thought ; that examples of art are, like books, some worse than worthless, others volumes of truth ; that collections are libraries of reference, condensations of artistic learning, not without occasional instructive examples of artistic ignorance or folly, sometimes assemblies of the whole art mind of a century or an age. Thus the study cannot fail to become elevating and refining, expanding the mind and teaching it sympathy in thought and feeling with the whole race of man, which has from all time found expression for its emotions in these examples which we collect and study.

The mere possession of and constant association with things beautiful, without study, will have good influence on character. The presence of fine-art products exerts a power over the rudest intellect. The crowds who sometimes attend art exhibitions on public days, as in the Metropolitan Museum of Art in New York, including all classes of society, are invariably orderly, kindly disposed to one another, readily yielding positions, each anxious that all should see and enjoy beautiful objects. This influence is no mystery. Examples are exceedingly rare of persons who desire to monopolize the knowledge and sight of beauty. On the contrary, it seems to be innate in all men to desire that others should share

with them the pleasure of looking at beautiful scenes or objects. Perhaps it is because the beautiful, in nature or in art, never wastes, becomes no less rich, however many eyes and minds feast on it. But I prefer to think that men have, in the presence of the beautiful, more than in ordinary life, the sense of universal brotherhood. Beyond cavil, museums of art are educational institutions of the highest value, and have at least as great civilizing power in communities as high schools and colleges.

But if my reader insists on a utilitarian view of art, and asks what is the practical value of beauty in a community or a nation, I refer him to what has been said of the history of ceramic art in England, and the industrial results which have there followed the making of collections of pottery and porcelain within a century.

The great industrial value of this art is hardly known in our country. The ability to make beautiful things is here, and thousands of men and women would find employment fitted to their talents in the decorative arts if the market were created which would justify the establishment of potteries of the higher class. Every collection of "old china," however small, helps towards the education of the people and the creation of the desire to possess beautiful porcelain and pottery for home use. Thus, and thus only, the market is to be established. Here and there, all over the country, these small influences will unite with each other; and at length the great object of the sensible political economist will be accomplished, and beauty in household potteries will furnish a new employment among the industrial pursuits of our country. A collection of beautiful ceramic specimens has in it a power similar to that which reposes in the water of the lake before my cabin, which sparkles in the light of the August moon as I write these concluding pages. Pretty, charming, even grand in scenery, but in the forest, thousands of feet above the sea, it is apparently a very useless bit of beauty. But the stream that flows from it, receiving and uniting with streams from springs and lakes scattered here and there among the hills, becomes the Merrimac, turns the wheels of innumerable mills, and gives employment, bread, and clothing to a hundred thousand people. It is a trite illustration, but the utilitarian or the political economist has perhaps never applied it to beauty in art, as a power to be exerted among the industries of a people. Nevertheless, the history of our subject is full of evidences of the truth that beautiful art is a very good thing to cultivate for the market, never supplying, but, on the contrary, always increasing the demand.

As I approach the end of my work, I desire to impress on the minds of collectors, especially young persons, the importance of making their col-

lections useful, and not mere gatherings of rarities. It is a waste of time and money to collect articles only because other people wish them, and they are therefore prized. To one who collects pottery and porcelain only because it is the fashion, and who buys rarities only for the sake of possessing them, a collection of postage-stamps would be more useful. He might from that learn at least something of geography, while from his ceramic collection formed on such principles he is certainly not the person to learn anything whatever. Collect for art study, or for historical study, or for the love of the beautiful, the study and enjoyment of the beautiful.

But what shall one do with a collection of beautiful works of art when one can no longer enjoy them? For the day comes when the delight of the eye fades, and the beautiful things of human art become of no account to us. Art outlasts the artist, and remains, the perpetuation of thought, for good or evil influence. The collector has a mission, not only in gathering for his own enjoyment and instruction, but in handing down to his children or to succeeding generations the means of pleasure and profit. It is something to have left behind one in the world that which will give even a moment of happy rest and refreshment to one of the weary laborers of times to be. It is something more to have left that which will instruct, improve, and benefit others. Whoever he was that showed the enamelled cup to Palissy had small thought of the vast consequences to follow. There are museums of art in many American cities, and historical and other museums in hundreds of our large and small towns and villages. Make your will, and if you have no children who will be educated and benefited by your art collections, in whatever department, give them to a museum of art or other public institution. No matter how few they are, or how apparently worthless. Every drop of water on the mountain helps to form the mill-driving river.

PART VI.

MARKS ON POTTERY AND PORCELAIN.

THREE classes of marks found on pottery and porcelain are important: 1. Factory marks; 2. Artists' marks; 3. Dates. These are either painted, printed, stencilled, impressed, embossed, or scratched in the paste. Some factories used no mark. At all factories it was common to mark only the larger pieces in services, sometimes the sugar-bowl only, and but one of a set of vases. Frequently the mark was entirely omitted. Workmen's marks—scratches, letters, numbers—are rarely important, having been made only to identify work for payment by the piece. Names of special patterns on printed wares, and private numbers for reference to factory pattern-books, are common. The same factory used different marks at different periods. Several marks sometimes occur on the same piece. One factory mark indicates the maker of the ware, another the place of decoration. So, too, a specimen, as often with Sèvres, has factory, artists', and gilders' marks, each with its date. Artists' signatures are sometimes in full on the painting, generally in initials, monogram, or adopted device, on the bottom of the piece.

The marks in the following tables are mostly fac-similes from specimens; but when painted or scratched, the form often varies greatly, and sometimes a mark must be studied out with hard labor, or even guessed at, by the aid of characteristics of the work. New marks are found from year to year, both of known and unknown factories. Thus our list of marks on Sèvres porcelain, being the latest, is the longest hitherto published, but will extend in future works.

The same device was often used by different factories, and care must be taken in distinguishing the specimens.

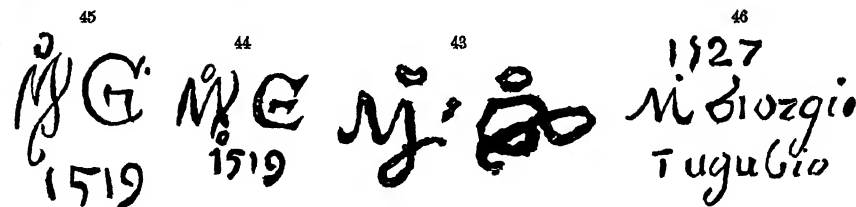
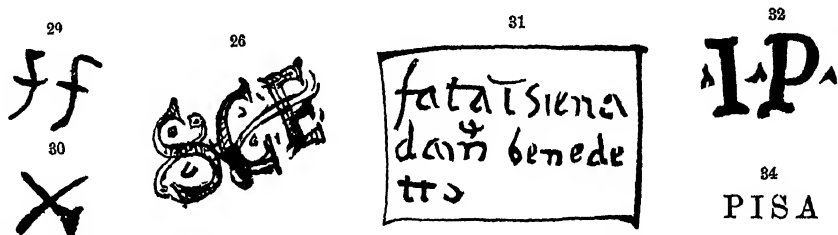
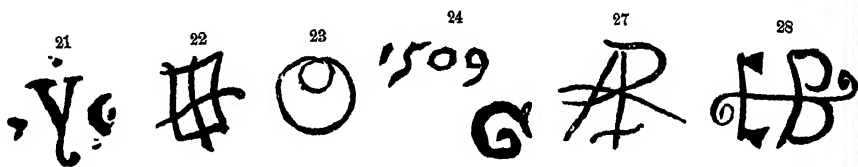
The mark is usually on the bottom of the piece, sometimes on the bottom rim, occasionally on the side, as in some pieces of Chelsea and of Liverpool wares. Marks, including the names of potters and of places, vary in form, and it has not been regarded as necessary to give all the forms.

In consulting these tables, it is important to refer to the text in the volume, where, in many cases, information is given concerning the marks of factories.



POTTERY OF ITALY.

- 1-25. CAFFAGIUOLO. The most frequent form of mark is that seen in Nos. 1, 4, 5, 6, 7, in which a P has a dash across the upright, while the curved line at top is continued upward to make an S, thus forming a monogram which includes S. P. F. (Senatus Populus Florentinus?) or S. P. R. (Senatus Populus Romanus?). Both these inscriptions are of frequent occurrence in Caffagiuolo decorations. The form of this mark varies greatly, sometimes being little more than a P, the lower part crossed by a waving line. It is found in one instance on Damascus ware.
3. Doubtful. Mr. Fortnum says Faenza. (S. K. Cat., p. 492.)
5. On a plate also marked *In Chaffaggiuolo*.
6. On a plate also marked *Cafagioli*, and on a dish marked *In Caffaggiuolo*.
9. The usual mark, with C or G, and under it *In galiano nell' anno 1547*; under this the artist's initials, A. F. f. (*ecit*). Galiano is a village near Caffagiuolo, where the artist, perhaps, worked.
11. An undeciphered mark on an early plate with the Virgin and Child. This is not certainly of Caffagiuolo, but possibly of Faenza. (S. K. Cat., 90, and Marryat, p. 104.)
12. Three marks, uncertain. One on a plate in the collection of Baron Gustave de Rothschild is dated 1507.



- 21-30. Caffaggiuolo. Marks 24, 28, 29, 30 are doubtful. 26 occurs in very large size on a dish attributed by Delange to Faenza, by Mr. Fortnum to Caffaggiuolo.
- 31, 32, 33. SIENA. 31 is on a plate painted in blue "*a porcelan*," and is a mark of *Maestro Benedetto*, chief potter artist there. 32 has been mistaken for a mark of Pesaro. 32 and 33 are also assigned to Benedetto, but Mr. Fortnum thinks them initials of owners of the objects. See page 449, mark 200.
34. PISA. See text.
35. Unknown. On a box with emblems of Cosmo de' Medici.
- 36, 37, 38. MONTE LUPO. 38 is on a dish dated 1668, and has been assigned by some to Monte Feltro.
- 39-47. GUBBIO. These are various forms of the signature of *Maestro Giorgio Andreoli*; 43 is, perhaps, most frequent. These fac-similes do not give size. The marks are frequently very large. The upper initials in 39 are, perhaps, those of the owner.

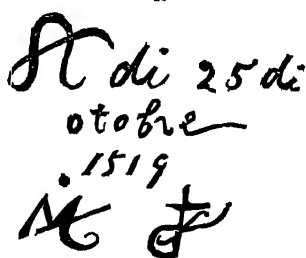
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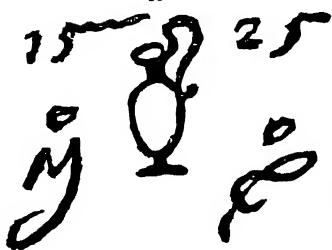
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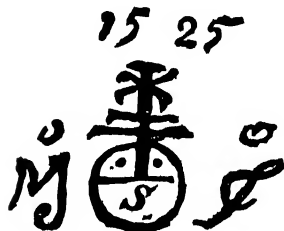
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51



52



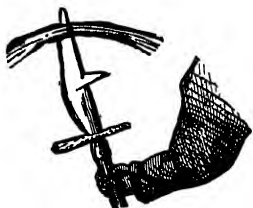
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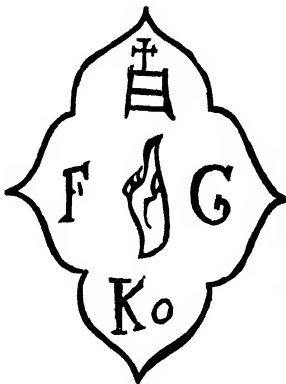
57



54



56



58



60



59



61



47-61. Gubbio.

47. Mark of *Maestro Giorgio* in very large size on dish with bathing scene, called "Diana and her Nymphs surprised, etc.," described in text, p. 167.

48. A similar form of mark was used in the sixteenth and seventeenth centuries on goods, etc., by merchants; also found on merchants' seals. More commonly the top forms a figure 4. Perhaps it is a trade-mark of a merchant. A similar form occurring in mark 52 is thought by Jacquemart to indicate ecclesiastical dignitaries, or pharmacies attached to monasteries. The mark 48 occurs on several pieces.

49, 50. *Maestro Giorgio*.

51. G. A., for *Giorgio Andreoli*.

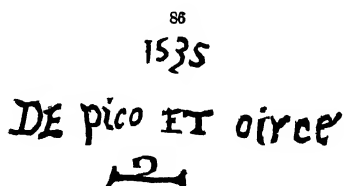
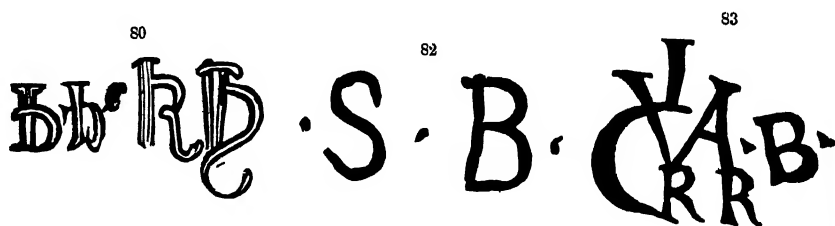
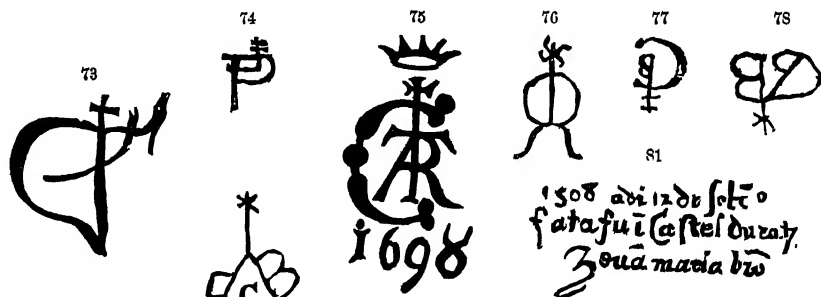
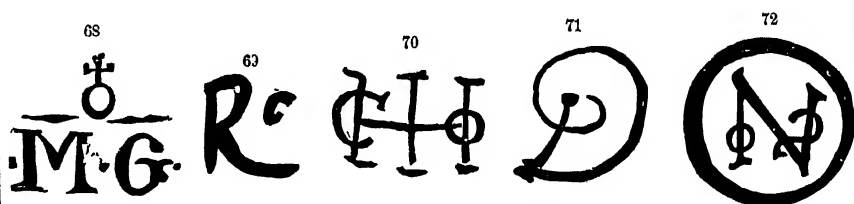
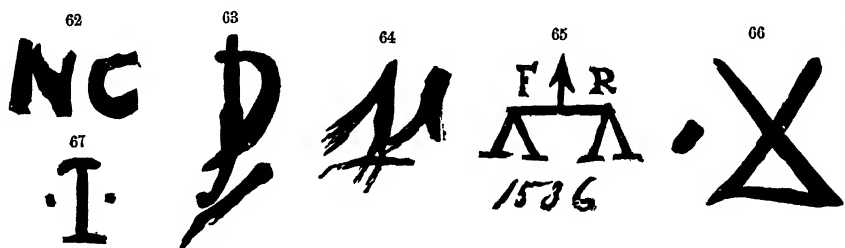
52. *Maestro Giorgio*, with mercantile or religious sign. See mark 48, above.

53, 54. *Maestro Giorgio*: some read *Maestro Gillio*.

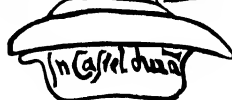
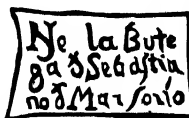
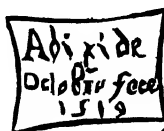
55. Gubbio, supposed later than *Giorgio*.

56. On a dish by *Giorgio*, dated 1518.

59-61. Marks assigned to *Maestro Vincenzo*, or *Cencio*.



85
CON · POL · DI · S · CASA



-
62. Gubbio.
63. Gubbio. Mark of the Master *Prestino*, whose signature also occurs in full.
64. Gubbio. Probably Maestro Vincenzo.
65. Gubbio.
66. Gubbio or Diruta. Uncertain.
67. Gubbio.
68. Gubbio. Jacquemart thinks the letters mean *Mater Gloriosa*, not Maestro Giorgio.
69. Gubbio. Probably Prestino.
- 70, 71, 72, 73. Marks found on Gubbio wares.
- 74-85. CASTEL-DURANTE.
- 74, 76, 77, 78, 79. Trade-marks, perhaps of dealers, found on Castel-Durante wares. See above, No. 48.
75. Mr. Fortnum thinks this probably the mark of the owner of the piece.
81. Signature of *Giovanni Maria, vasaro*, and date 12 Sept., 1508.
83. Doubtful. Castel-Durante or Fabriano. Mark of painter or owner (S. K. Cat., p. 314).
85. On cups, etc., made of dust of the Santa Casa at Loretto. See text.
86. URBINO. Mark on inferior work. Mr. Fortnum thinks of a young artist.



87-111. Urbino.

87. Attributed to *Flaminio Fontana*.

88. Unknown artist, on a plate with St. Luke.

89, 97. *Nicola da Urbino*.

90. *Orazio Fontana*.

91. Attributed by Passeri to Orazio Fontana, but 93 is on work much later.

92. Unknown artist.

94. On work of Orazio Fontana.

95. Orazio Fontana.

96. Orazio Fontana. The Greek *Phi* may be a monogram of *Of* and the *Delta* mean Durantino.

98, 99, 100, 106. Signatures of Francesco Xanto.

101. On one of the pieces of the Gonzaga-Este service, by Nicola da Urbino.

102. On a dish painted with St. Jerome.

103. *Francesco Durantino*.

104, 105, 109, 112. Found on Urbino work.

107. Initials of *Gian. Maria Mariani*, dated 1542.

108. Attributed to *Luca Cambiasi*.

110. *Alfonso Patanazzi*.

111. CITTA DI CASTELLO. On a plateau sgraffiato.

113. VITERBO. Date 1544.

114, 115, 116, 117. DIRUTA.

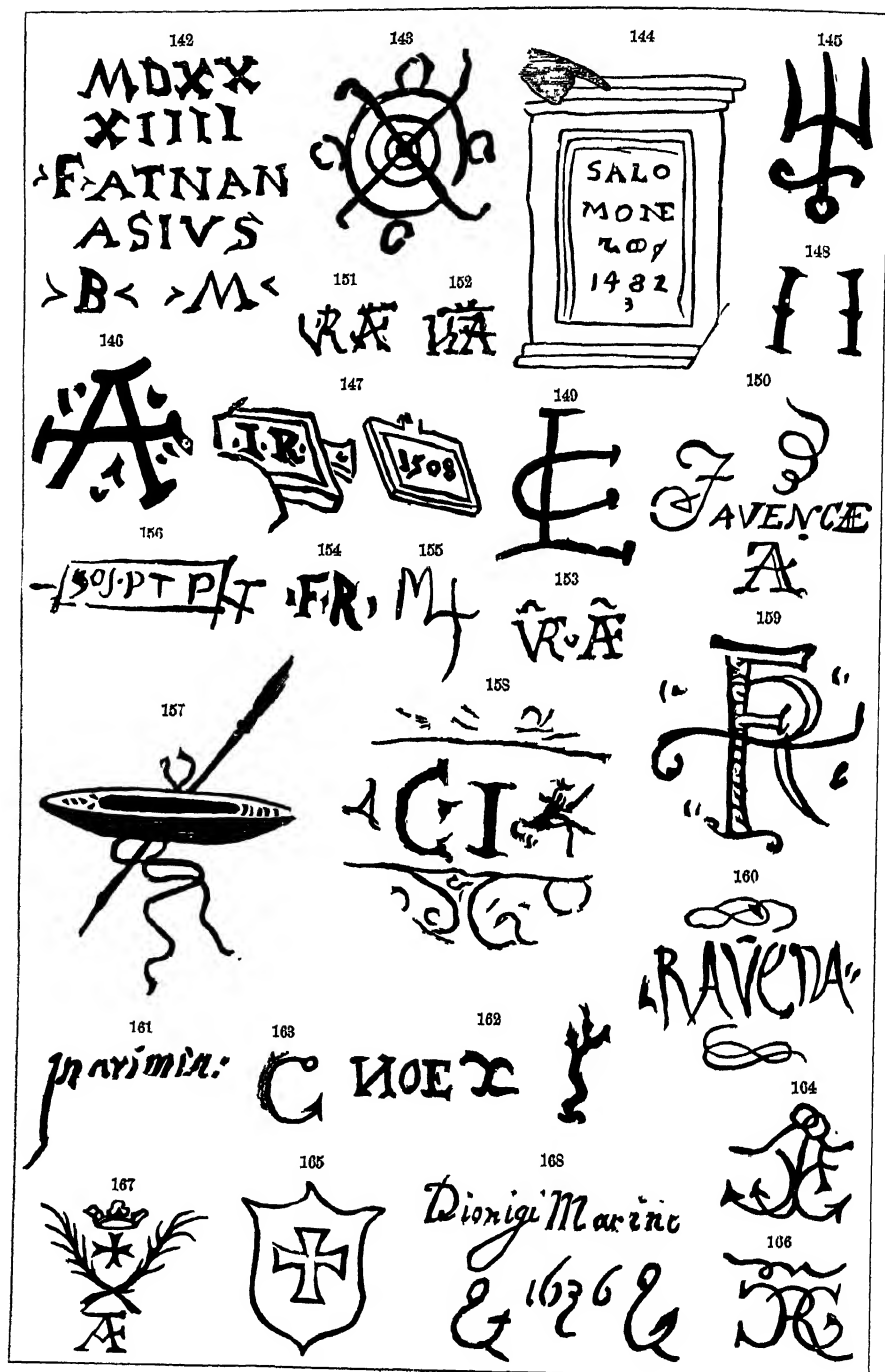


118, 119, 120. Diruta.

121. FABRIANO.

122, 123, 124. ROME.

125-141. FAENZA. 125 and 126 are typical marks of the Casa Pirota. 127 is a frequent mark. 131 is the date 1491 between the letters M and G, which may imply *Mater Gloriosa*. 134, 135, 136, and 144 (next page), are all of the same workshop.



142-156. FAENZA.

142. On a plate with allegorical subject. B. M. for *Baldasaro Manara*.

143. Casa Pirota. A frequent mark in similar form.

144. On a plate representing Solomon. Lazari reads the mark as G. I. O., but Mr. Fortnum thinks it T. M. in antique letters.

145. Doubtful. Faenza or Caffaggiuolo.

155. Said to be on a piece with the name of Giovano of Palermo, and the words *in Faenza*. Doubted by Jacquemart.

157. FORLÌ. On a plaque, dated 1523.

158, 159. Forlì. Signatures on Forlì wares are known also of *Mo iero da Forlì*, and *Leuchadius Solobrinus* 1564.

160. RAVENNA.

161. *In arimin. Rimini.*

162. RIMINI.

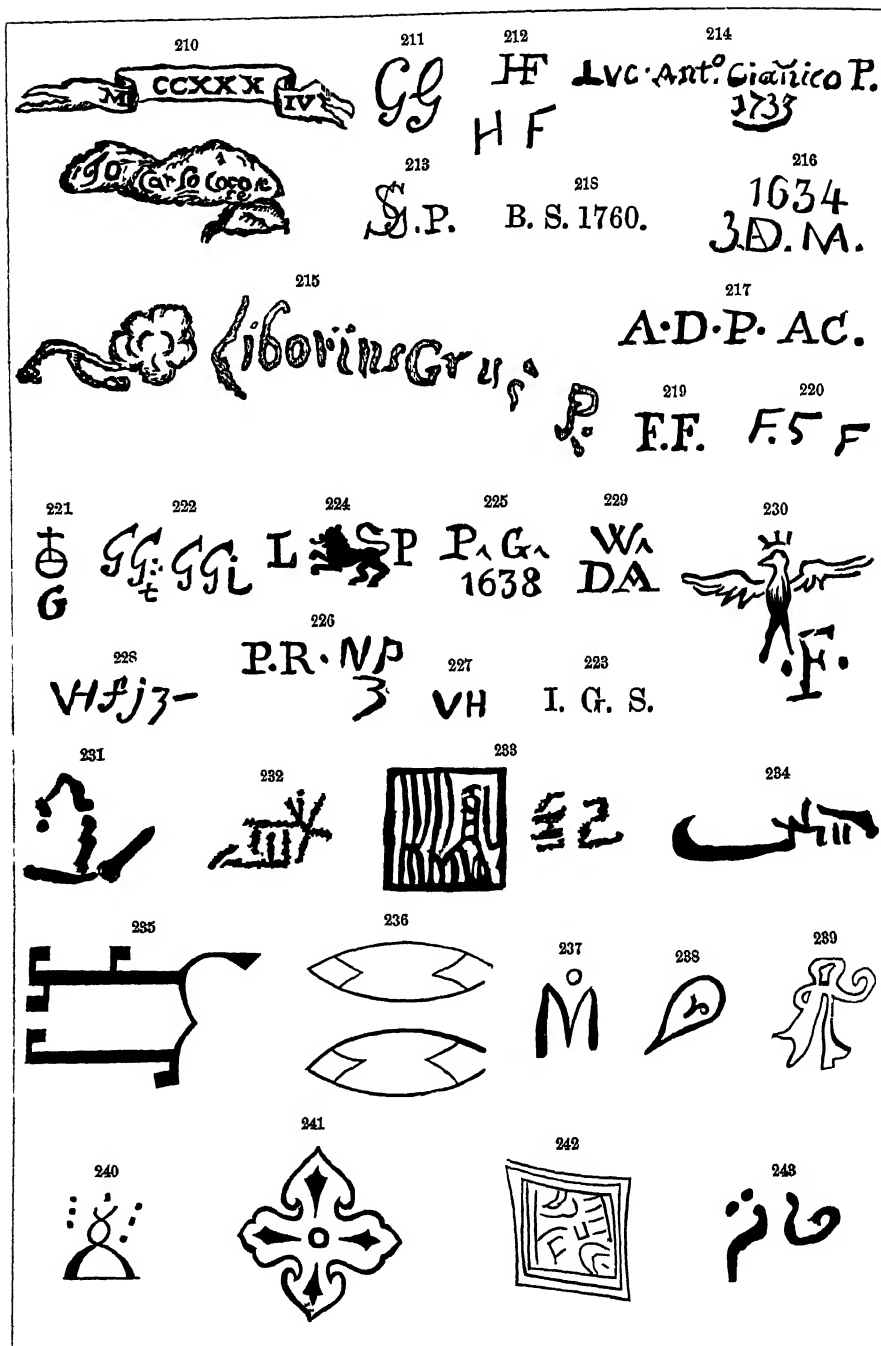
163-168. VENICE.

165. On a plate from the botega of *Mo Ludovico*. Other Venice pieces are marked *In Botega di Mo. Jacomo da Pesaro*; and *Jo Stefano Barcello Veneziano pinx.*

CANDIANA, 1620, is a mark on a plate. See text. There is no such place as Candiana. The work may be Venetian.



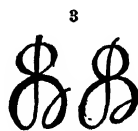
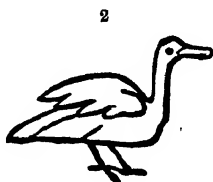
169. VENICE.
170. On a plate seemingly Venetian.
171. CORNARO.
172. TREVISO.
173, 174, 175. BASSANO. The *Terchi* family. The mark 173, which is the iron crown, is also on other fabrics.
176. VERONA. Illegible mark, the enamel being broken. It occurs on a plate under the words 1563 *adi 15 zenaro. Gio Giovanni Batista da faenza in Verona.* See text, p. 175.
177, 178. PADUA.
179. GENOA. A light-house, hanging out a signal.
180. Attributed to Genoa by M. Demmin.
181. SAVONA. The shield mark is drawn in various shapes, often with a few dashes of the brush, and is accompanied by a variety of letters.
182. SAVONA.
183. SAVONA. *Gio. Anton. Guidobono.*
184. SAVONA.
185. SAVONA. Solomon's knot.
186. TURIN. Escutcheon of Charles Emanuel, 1638.
187. TURIN. Escutcheon of Victor Amadeus, 1713.
188. TURIN. Cross of Savoy and trumpet.
189. MAURIENNE.
190. MILAN.
191-192. Milan. *Felice Clerice?*
193. Milan. *Pasquale Rubati.*
194. Milan.
195, 196. LODI.
197. TREVISO.
198, 199. NOVE.
200. SIENA. Initials of Campani?
201. PESARO. *Casali and Caligari, 1763.*
202. SAN QUIRICO. Arms of Chigi. Dated 1723.
203. NAPLES. Vases; one inscribed *Paulus Francus Brandi Pinx.*
204, 205, 206, 207. On same class of Naples vases. See text, p. 178.
208, 209. Naples. *Del Vecchio* fabric, impressed marks.



210. Naples. Attributed to Capo-di-Monte.
 211. Naples. *Giustiniani*, impressed. Other marks of this fabric are the name in full; the letter G, the name with I. N. and a vase.
 212. Attributed to Naples and to Castelli. We have it on wares found in Germany. Mr. Fortnum thinks it German.
 213, 214, 215. CASTELLI; 213, *Saverio Grue*; 215, *Liborius Grue*.
 216-230. Unknown marks on Italian pottery.

SARACEN POTTERY AND PORCELAIN.

231. PERSIA. Painted in blue on a hard-paste porcelain bowl. (T.-P. Coll.)
 232. Unknown. On hard-paste porcelain bowl. (T.-P. Coll.) Engraved through the glaze.
 233. Unknown. The square mark painted in blue, the characters engraved through the glaze, on a hard-paste porcelain bowl. (T.-P. Coll.)
 234. Persia. In blue on hard-paste porcelain bowl (Coll. of G. Trumbull, Esq.).
 235. Persia. In blue on hard-paste porcelain vase. (Hoe Coll.)
 236. Persia. In red on vase, apparently soft-paste porcelain. (Hoe Coll.) For account of marks 231 to 236, see text, p. 119.
 237. MANISES, in Spain. On copper-lustred ware. (Chaffers.)
 238. On a Hispano-Moresque plate, fifteenth century. (Chaffers.)
 239. On a Hispano-Moresque dish, gold-lustred. (Chaffers.)
 240. On a Persian or Damascus ware jug.
 241. RHODES. Given by Marryat as found on Rhodian wares, supposed to represent the cross of the Knights.
 242. Given by Mr. Fortnum as on a flask of "artificial porcelain-paste, perhaps engobe," with design eminently Persian, but showing Chinese influence, brought from Persia. (S. K. Cat., pp. 8, 13.)
 243. Persia. Name of a maker, *Hatim*, on Persian pottery. (S. K. Cat., p. 12.)
 A mark closely resembling the common mark of Caffagiuolo (mark 1 of Italian pottery) occurs on a Damascus ware bottle in Mr. Franks's collection. (S. K. Cat., p. 13.) Modern Persian fabrics have the names of makers with dates.



WB
32

va uasseur.
a Rouan

Borne
Pinxit
Anno
1738

W BB L m B4 A h VP
Jh A B 4 3 7

GB #C# dieux R.D P.A.T S3
1765 1776 B

A D S3 GN I733 GR GA F

n +GL MF I Pr M J6 1/2

PC GS II GE EA GS 3R

P.C G3 ER V GS H n2#

OD MF h L MD A D CO

MS CH G3 dieux JC GP

POTTERY OF FRANCE.

1. On a green enamelled plate are escutcheons of arms of French provinces, and the one here given, which contains part of the arms of Beauvais and the name *Masse*, perhaps of the artist. An inscription ends with *Fait en Decembre 1502*, or as M. Jacquemart reads, 1511.
2. Porrou. The goose of Thouars, found on a vase; supposed reference to Oiron. See text.
3. Avon. Mark on the Nurse and other figures, which were formerly attributed to Palissy.

ROUEN. All the other marks, which are not numbered, on the page opposite, are found on pottery of Rouen. Many of these are similar to marks on Delft. The only artists' signatures known are the two, easily read, of *Dieul*, who decorated *faïence à la corne*.

Other marks painted, sometimes rudely, on Rouen ware are as follows (these are not in fac-simile):

Ro	Go	G 3	D V	Gm	M
R D	G L	P P	Mo	H C	M v
P. D	G Md	R	D L	H M	W G t
G.	G W	S.	Gi	H T	Mrs Guillibeaux.



- 1, 2, 3. LILLE. François Boussemart.
4. Lille. Febvrier and Boussemart?
- 5, 6. Lille. Barthelemi Dorez, 1709-'15. His grandson signed *N. A. Dorez*, in 1748.
- 7, 8, 9. Lille; 7, about 1788; (?) 8, Petit?
10. VALENCIENNES. *Louis Dorez*.
- 11, 12, 13, 14, 15. ST. AMAND LES EAUX. *P. J. Fauquez*.
16. PARIS. *Claude Reverend's* mark.
- 17, 18. Paris. On ware resembling Reverend's.
19. SCEAUX. Mark of Glot, who also marked with the word SCEAUX. Prior to 1772 the mark had been S X.
20. Sceaux? or Bourg la Reine? Doubtful.
21. Sceaux. Glot's period.
22. BOURG LA REINE.
23. ST. CLOUD. *Trou's* mark.
- 24, 25, 26. SINCENY. 25 is signature of *Pellevé*, director.
- 27, 28, 29, 30, 31, 32. APREY. The factory monogram Ap, with initials of Jarry and other artists.
33. MATHAUT.
- 34, 35. NIDERVILLER. Beyerlé period. The mark is B N in monogram.
- 36, 37, 38, 39. Niderviller. Custine period. These marks must not be confounded with Kronenburg, or Ludwigsburg.
40. SARREGUEMINES. *Utznneider & Co*.
41. STRASBOURG. *Charles Hannong*.
- 42, 43, 44. Strasbourg. *Paul Antoine Hannong*.
- 45, 46, 47. Strasbourg. *Joseph Adam Hannong*.
48. Strasbourg or Hagenau. Possibly *Balthasar Hannong*.
49. PREMIERES, in Burgundy. *J. Lavalle*. Other marks are J L P in a script monogram.
50. MEILLONAS. *Madame de Marron*.
- 51, 52. VARAGES.
- 53, 54, 55. TAVERNE. *Gaze*, director.
- 56-86. MOUSTIERS. The marks including a monogram of o l are attributed to Joseph Olery. Some are his, but Jacquemart doubts many. 86 is supposed signature of Fouque, successor to Clarissy. Names, perhaps, of Spanish artists—*Soliva, Miguel Vilaz, Fo Gzanzel, Cros*—occur. A potter, *Ferrat*, about 1760 signs his name. *Pierre Fournier* signs work dated 1775; *Antoine Guichard*, in 1763; *Thion*, in the last century. *Moustiers* appears as a mark written and also applied through pricked points. *Viry*, painter, signs a plate; see text, p. 200.



87-95. Moustiers. 87 and 88 are marks of *Feraud*, potter. 95 is probably Olery.

The other marks are uncertain.

96-98. MARSEILLES. The fleur-de-lis is attributed to *Savy* after 1777.

99-102. Marseilles. *J. G. Robert*.

103, 104. Marseilles. *Veuve Perrin*.

105. Marseilles. *A. Bonnefoy*.

106. Marseilles. *J. Fauchier*.

107. MARANS. *J. P. Roussencq*.

108, 109. Marans.

110. RÉNAC. (Jacquemart.)

111. ORLEANS.

112-123. NEVERS. 112 is the earliest known signature; 113, Denis Lefebvre;

114, Jacques Bourdu; 115, 116, Henri Borne on statuettes; 117, Jacques Seigne; 119, Dominique Conrade, third of the name, 1650-'72; 120, Etienne Born; 121, François Rodriguez; 122, Nicholas Viodé; (?) 123, from the Conrade arms.

124. LIMOGES. Massié.

125. LA TOUR D'AIGUES.

126. *Avisseau*, modern potter at Tours (died 1861).

127-146. Unknown marks on French pottery.

147
N. J. J. J.
1696

148
H

149
G
H

150
II.

151
J

152
B

153

Leger.

154
Leieune.
1730.

155
A.R. S

156
E

157
M

158
NICOLAS H.V
1738

159
OIP, OP

160
OS

161
I.R. PAIVADEAV
1643

162
PB

163
P

164
P+

165
P

166
6P

167
T

168
PO

169
P.R.

170
 $\frac{PV}{3/2}$

171
R

172
R

173
R.B
F

174
RL

175
R.M.
f

176
s. G. h.

177
S
NE

178
T.C.E
1793 an 41

179
VM

180
 $\frac{W}{2}$

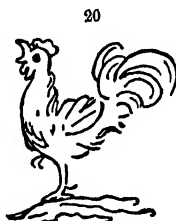
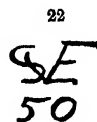
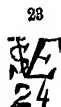
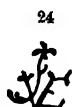
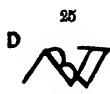
181
W

182
W
H

183

P.

147-183. Unknown marks found on French pottery. On a basin is the mark
ALEX 1724. On a bas-relief is the name *J. Alliot*.


1
6*2
*93
* G4
 $\frac{CCC}{C.R.}$ 5
IM6
HP7
B8
B. L9
11
GA10
12
i13
F
i67714
F
1.6.8.015
R G16
MD
Soot
172017
J G18
127
D C
V19
V
GH
160
5222
23
21
R24
25
D
26
 $\frac{PVM}{48}$ 27
28
 $\frac{MP}{9}$ 29
DR
230
Hain31
I D M32
33
34
35
K36
AK
205
146
26837
HK38
ES39
x Portuyn40
W V D B



POTTERY OF BELGIUM.

- 1-3. TOURNAY. Marks, probably, of Peterynck.
4. TERVUEREN.
5. MALINES. Attributed by Jacquemart.
6. BRUGES. *Henri Pulinx*.
7. LUXEMBOURG. Mark of the brothers *Boch* before the French Revolution.
8. Luxembourg. Subsequent mark, impressed.
- 9, 10. Luxembourg.
- 11-19. Unknown marks on Flemish pottery.

POTTERY OF HOLLAND.

20. AMSTERDAM, 1780-'83. *Hartog v. Laun*.
- 21-40. DELFT.
21. *Samuel Piet Roerder*.
- 22, 23, 24. *Suter van der Even*, 1580.
28. Factory with sign of *De Metaale Pot*, 1639.
- 29, 30. *De Paauw* (The Peacock), 1651.
31. *Jacobus de Milde*, 1764.
32. *Martinus Gouda*.
33. *Q. Kleynoven*, 1680.
34. *Cornelius Keyser*, *Jacobus Pynaker*, and *Adrian Pynaker*, 1680.
37. *Jan Jansz Kuyhck*, 1680.
38. *Johannes Mesch*, 1680.
39. *T' Fortuyn* (The Fortune), 1691.
40. Widow of *Pieter van der Briel*.

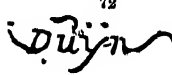
41 * IB 42 * D 43 * 130 44 A 45 A 46 I D A 47  DVD

48 Roos 49  50 $\frac{L.S}{7}$ 51  52 WD 53 $\frac{I D}{12}$

54 DEX 55 Z:DEX. $\frac{18}{2}$ 56 I H D 57 Hooren 58 M

59  60 E. B. S. 61  62 GVS 63 

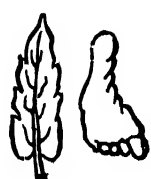
64  65  66 HB 68 $\frac{H V M D}{5}$

69 THART 70 thart 71 P 67 $\frac{H B}{2}$ 72 

73  74  75 De Blompot 76 

77 D. S. K. 78  79  80  81 W. V. B.

- 41-81. Marks deposited in the Hôtel de Ville, Delft, in 1764, by potters, designating their shop names. These are not always given in fac-simile.
- 41-45. DE WITTE STER (The White Star). *A. Kielle*.
46. IN DER VERGULDE BOOT (The Gilded Boat). *Johannes der Appel*.
- 47-49. DE ROOS (The Rose). *Dirk van der Does*.
50. DE KLAUW (The Claw). *Lambertus Sanderus*.
- 51, 52. DE DRIE KLOKKEN (The Three Bells). *W. van der Does*.
- 53-56. DE GRIEKSE A (The Greek A). *J. T. Dextra*. 1765, the works passed to *Jacobus Halder Adriaensz* (M. 56).
57. DE DRIE PORCELEYNE ASTONNEN (The Three Porcelain Barrels). *Hendrick van Hoorn*.
- 58, 59. DE ROMEYN (The Roman). *Petrus van Marum*. The same year the manufactory passed into the hands of *Jan van der Kloot Jonsz* (M. 59).
60. T'JONGUE MORIAANS HOFFT (The Young Moor's Head). Widow of *Peter Jan van der Hagen*.
- 61-63. IN T'OUDE MORIAANS HOFFT (The Old Moor's Head). *Geertruy Verstelle*.
- 64, 65. DE PORCELEIN BYL (The Porcelain Hatchet). *Justus Brouwer*. Occurs frequently.
- 66, 67. DE DRIE PORCELEYNE FLESCHEJES (The Three Porcelain Bottles). *Hugo Brouwer*.
- 68-70. T'HART (The Stag). *Hendrik van Middeldijk*.
71. DE TWEE SCHEEPJES (The Two Ships). *Anth. Pennis*.
- 72-74. DE PORCELEYNE SCHOOTEL (The Porcelain Dish). *Johannes van Duyn*.
75. DE VERGULDE BLOMPOT (The Gilded Flower-pot). *P. Verburg*. The mark is not fac-simile.
76. DE PORCELYN FLES (The Porcelain Bottle). *Pieter van Doorne*.
77. DE DUBBELDE SCHENKKAN (The Double Pitcher). *Thomas Spaandonck*.
- 78-80. DE LAMPETKAN (The Ewer). Widow of *Gerardus Brouwer*.
81. DE TWE WILDEMANS (The Two Savages). Widow of *Willem van Beek*.

B	$\frac{A}{D}$ 12	K AK	R	AP	AV $\frac{27\frac{1}{2}}{0}$	AV $\frac{3}{1}$ $\frac{2}{2}$ 7
⊙	B	BVD	K 15 0	E E	Σ N.K.	
F ^{DH}	fi	GB $\frac{4}{x}$	R	HDK 7	HEG EG 1732	
h. MVL.	HPI	*JB	*JB	IG 26	ID W	
R J	P	V E	J ^{VOH} 3	WH	JG $\frac{22}{\frac{1}{2}}$	
JE	$\frac{L}{2}$ 4 GK	V	MVB 1757	KF	VA	
K:D:		.K.			P.	
				PVB		
P'W'D'S A ^o J754.		P 15	R		V N.380	
				$\frac{9}{18}$ PVS WVS 1717		
V F 7	V 2 2	V 1 2 DS	R WK	WK		

UNKNOWN MARKS ON POTTERY OF HOLLAND.

All the marks on the opposite page are found on pottery apparently of Delft; but their signification is unknown. It is important to note that similar marks are found on wares of Rouen, and other factories. The collector will exercise judgment as to paste and style of decoration before assigning specimens, and will frequently find it impossible to decide where a piece was made.

¹
B
Z²
Z³
AB
1638⁴
Matthias
Rosa
im. Anspach⁵
B. J.⁶
BK
C⁷
B P⁸
B P B. P B P⁹
F¹⁰
M¹¹
A
F¹²
*
H¹³
göggingen
H S¹⁴
S.¹⁵
G
⊗¹⁶
jz
⊗¹⁷
⊗¹⁸
⊗¹⁹
G: Koxdenbusch.²⁰
GK:²¹
A²²
NB.
K: F 4.²³
Stebner
1771
d. 13 8bris²⁴
S²⁵
*
ME
u8²⁶
*
E
J. 20. 68. J. J.
7
Hm²⁷
*
E
D. 11. 10
4²⁸
HE JA²⁹
B
S³⁰
B P
83X³¹
F. B. C. F.
1779³²
GHEDT
W. J. M.
J 750³³
H
S³⁴
A
P
MR³⁵
HIS:³⁶
H K N³⁷
H V X³⁸
H N X³⁹
J⁴⁰
H
H⁴¹
H⁴²
F. Pahl.
A. S. 1796.⁴³
PH⁴⁴
N Pöfsmoer
Anno 1725

POTTERY OF SWITZERLAND.

- 1, 2. ZÜRICH.
3. WINTERTHUR. On an ecritoire. *Jacquemart*.


POTTERY OF GERMANY.

4. Anspach (Bavaria).
- 5, 6, 7, 8, 9. BAIREUTH. Sometimes the name in full.
- 10, 11, 12. FRANKENTHAL. 10 and 11 are marks of Paul A. Hannong; 12, of Joseph A. Hannong. It is not possible to distinguish the first mark from Hannong's when at Strasbourg.
13. GÖGGINGEN, near Augsburg, established about 1750.
14. Harburg. Initials of Johann Schaper.
- 15, 16, 17. HÖCHST. 15 has the G for *Geltz*; 16 the Z for *Zeschinger*; 17 is the wheel alone, the arms of Mayence. See p. 487, mark 54.
18. POPPELSDORF. Wessel's manufactory; impressed. Also found impressed with the name *Mettlach* on pottery of that place.
- 19, 20, 21, 22, 23. NÜRNBERG. M. Demmin gives a monogram of H C D, and date 1550, as on a stove. *Gluer*, probably an artist, signs a dish with *Nurnberg* 1723. Plates are signed *G. F. Greber Anno 1729 Nuremberg*. *Stroebel* signs a bell, with date 1724, and a dish painted, with date 1730. A stove of green tiles, with religious subjects, has the signature of *Hans Kraut*, and date 1578. Hans Kraut was the great potter of Willingen.
24. SCHREITZHEIM.
- 25, 26, 27. STRALSUND.
- 28 to 43. Unknown marks on German pottery.

44


45
 $\frac{R \cdot M}{E}$

46
 $\underline{S.}$

47


48
 $\frac{VH}{3}$


49


50


51


52


53


54


55

 HV C Z S
 1618

56

 V 39

57
 $\frac{Ront \frac{10}{7} 70}{24 \beta KY}$
 $\frac{CE}{\frac{1}{3}}$

58
 $\frac{R-}{N^{\circ} 1 \frac{1}{4}}$ H

59
 $\frac{Ront \frac{27}{8} 67}{CB}$

60
 $\frac{Ront \frac{6}{3}}$


61
 $\frac{Aff:}{B}$
 A

62
 $\frac{Aff:}{B}$

63
 $\frac{Höft}{B. dir}$
 C h i t

64

 B L

65

 $\frac{W}{10} CB$

66

 MB W

67
 M

68
 MB

69
 $\frac{CC}{V}$ $\frac{CC}{E}$ $\frac{CC}{E}$

70
 MJT. Künersberg.

72
 $\frac{T}{1} \frac{V}{12}$

73
 $\frac{K}{B}$
 $\frac{L}{L}$

74
 $\frac{K}{J}$
 $\frac{K}{K}$

75
 $\frac{K}{J}$
 $\frac{J}{J}$

76


77
 $\frac{K}{AL}$ 08/

78
 $\frac{K}{B}$ Dir. t
 A L 69

79
 $\frac{K}{B}$
 R. c

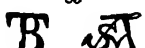
80
 CO >

81


82


83


84
 E, R,

85


44-56. Unknown marks on German pottery.

POTTERY OF SWEDEN, ETC.

57-62. RORSTRAND. 61 and 62 are probably signatures of *Arfinger*, according to Mrs. Palisser. Chaffers gives a mark, *Storkholm* 22, 8. 1751 *D H B*, as of the factory after Rorstrand was united to Stockholm. The marks include the date, price, and signatures of artists. *Stockholm* is found, and also *Rorstrand*, impressed.

63. Rorstrand, or Marieberg, or Kiel?

64-69. MARIEBERG.

70. Swedish?

71. KUNERSBERG.

72. Kunersberg?

GUSTAFSBERG, 1820 to 1860. The mark is the name with an anchor.

HELSINBURG. Given by Mr. Chaffers as on stone-ware, made from 1770.

73-79. KIEL.

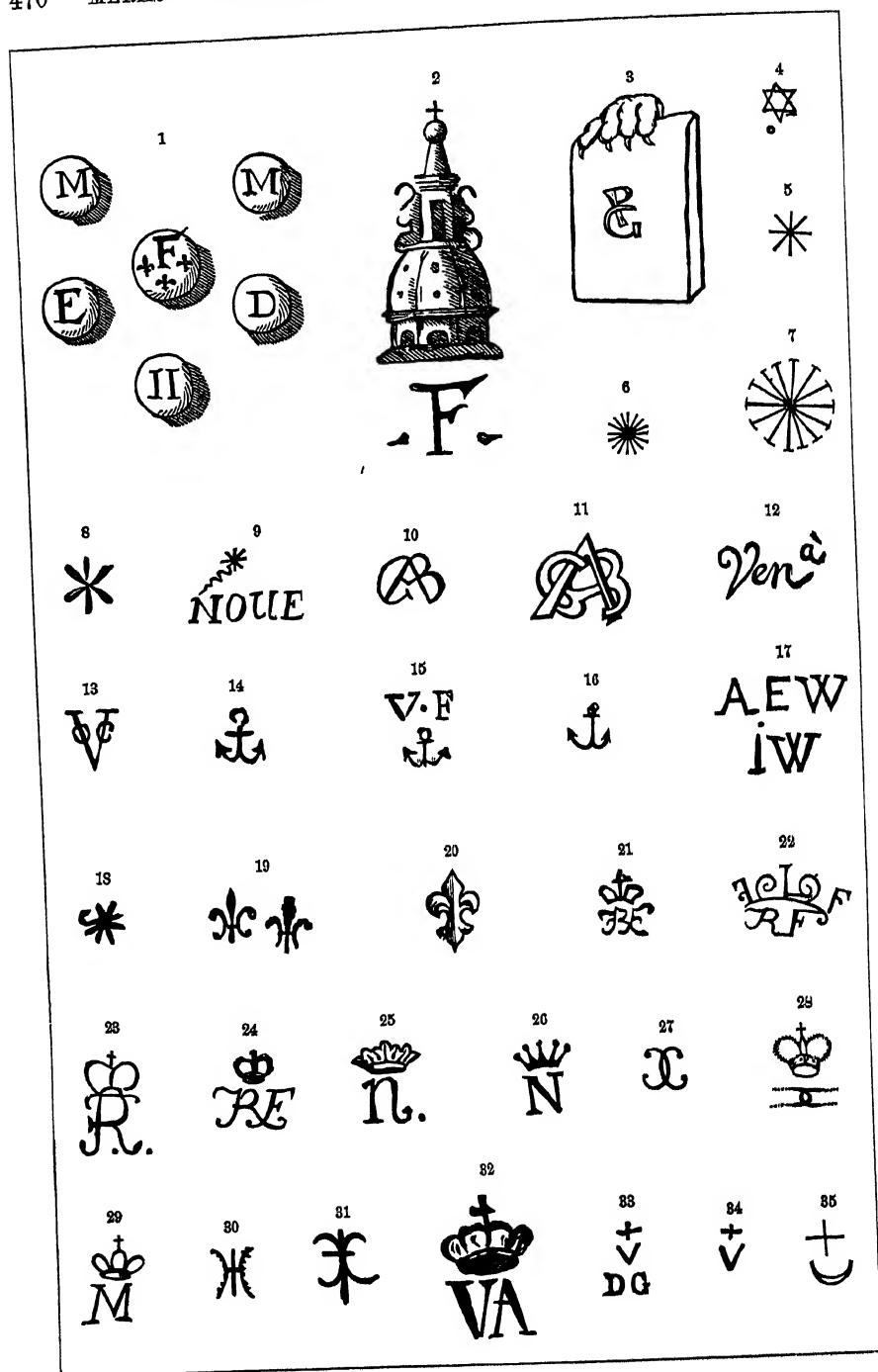
POTTERY OF SPAIN AND PORTUGAL.

80, 81. ALCORA.

82, 83. Attributed to SEVILLE.

84, 85. LISBON.

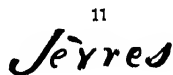
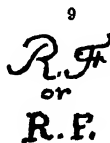
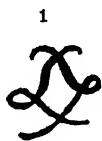
RUSSIA and POLAND. For marks on pottery of Russia and Poland, see p. 491.



MARKS ON PORCELAIN.

PORCELAIN OF ITALY, SPAIN, AND PORTUGAL.

1. FLORENCE. On Mediccan porcelain. The arms of the Medici, and initials of Franciscus Medici Magnus Etruriæ Dux Secundus.
2. Florence. On Medicean porcelain. Dome of the Cathedral.
3. Tablet held by a lion, in the decoration of a bowl. See text.
- 4, 5, 6, 7. DOCCIA, near Florence.
- 8, 9, 10, 11. LE NOVE. 10 and 11 are signatures of *Gio. B. Antonibon*.
- 12, 13. VENICE. *Vezzi*, impressed, or in red.
- 14, 15, 16. Venice. *Cozzi*; in red, blue, or gold. This mark must be distinguished from that of Chelsea in England.
17. Venice.
- 18-26. NAPLES; CAPO-DI-MONTE factory. 18 is supposed to be the earliest mark, in blue. The fleur-de-lis was also used at the Buen Retiro factory in Madrid, as given below. 21, 22, 23, 24, are marks of Ferdinand IV. in and after 1759. The crowned N is often reversed in the mark. The marks are sometimes in color, sometimes impressed.
- GIUSTINIANI of Naples made hard-paste porcelain, using the same marks as on pottery; see p. 451.
- 27-31. MADRID. Marks of the Buen Retiro factory. This factory was an outgrowth of Capo-di-Monte in Naples, and used the fleur-de-lis mark also. 27 and 28 are the cipher of Charles III. 29 is M, for Madrid.
32. VISTA ALLEGRE, near Oporto, Portugal.
- 33, 34, 35. TURIN, Italy; Vineuf factory of Dr. Gionetti, impressed or scratched. The cross is also sometimes accompanied by scratched lines, forming VN in monogram.



35



PORCELAIN OF SÈVRES.

1. VINCENNES. The interlaced double L, the initial of the king's name, was adopted by the Vincennes factory shortly after its foundation, and used till 1753. The mark, unaccompanied by other letters, is rarely, if ever, found on porcelain made at Sèvres. After the removal of the factory to Sèvres, this mark, accompanied with date letters, as hereafter explained, continued the typical mark of the factory down to the Revolution.
2. Vincennes. The mark was usually in this form, with a dot in the monogram. Marks 1 and 2 should be found only on pieces made prior to 1753.
3. Vincennes and Sèvres. In 1753, at Vincennes, the system of dating by letters of the alphabet was adopted, A being 1753, B 1754, etc. See *Table of Marks used to indicate Dates*. The factory was removed to Sèvres in 1756. A, B, C, D, therefore, date wares of Vincennes. D also dates work at Sèvres. The date letter is placed either within or outside of the monogram, and is sometimes a capital and sometimes a small letter.
4. The crown was adopted over the monogram as the mark of hard-paste porcelain after its introduction. Forms of this mark are 5, 6, and 10, showing accompanying signatures of artists. Thus, mark 10 includes the factory mark, the device of the artist *Vieillard*, and the date DD, 1781. This mark on a service in the T-P. collection has also the mark of another artist, *Baudoin*, on each piece.
7. The letter Z having been reached in 1777, double letters were used thereafter, AA being 1778, etc. A difference of opinion exists as to whether the letter J was used for 1762, but the best authorities now agree that it was used.
- 8, 9. In the Republican period the royal initial was abandoned, and the mark R. F., for *République Française*, was adopted (1792–1800), always accompanied by the word *Sèvres*. The R. F. was in monogram, as in mark 8, or in one of the forms in mark 9. Dates were not used from 1792 to 1801.
11. About 1800 the word Sèvres was used alone, without the R. F. It was usually in a form similar to mark 11, but varied as made by different hands. This mark was in use from 1800 till the end of 1802.
12. In the Consular period, 1803, the mark 12, for *Manufacture Nationale*, was used, stencilled in red.
13. In the Imperial period, beginning May 8th, 1804, mark 13, for *Manufacture Imperiale*, was adopted, and used till 1809, stencilled in red.
14. The imperial eagle was adopted as the mark in this form in 1810, printed in red, and continued in use till the abdication, in 1814. Date marks were used from 1801, for which see *Marks used to indicate Dates*, p. 481.
15. Mark of the period of Louis XVIII., used from May, 1814, to September, 1824, the date indicated by the last two figures of the year. This mark was printed in blue.

- 16, 17, 18, 19. Marks used in the reign of Charles X., from 1824 to 1828, printed in blue; the figures under the mark indicating the year of the century.
- 20, 21. Marks used in the reign of Charles X., in 1829 and 1830. Mark 20 was used on decorated wares; 21 was used on pieces which were gilded only.
22. This mark was used only in 1830, under Louis Philippe.
23. Used from 1831 to November, 1834, under Louis Philippe.
24. Used from November, 1834, to July, 1835.
25. The cipher of Louis Philippe, used from July, 1835, to 1848.
26. Used under the Republic from 1848 to 1852.
27. Used under the Empire of Louis Napoleon, from 1852 to 1854.
28. Cipher of Louis Napoleon, used from 1854 to 1872.
- 29, 30. These marks have been used in addition to the factory mark since July, 1872, usually printed in red.
- 31, 32. The letter S with the date of the year of the century, in an oval, was adopted in 1848 as the factory mark on all pieces, and continues in use. On white wares, sold without decoration, it is cut across by a scratch through the glaze. It is printed in pale green. Mr. Chaffers says it has been used on white wares since 1833. Many modern pieces with this mark cut across are decorated by amateurs and others.
33. Marks of this kind, containing names of châteaux or palaces, were placed on pieces, table services, etc., made for use in the royal residences thus indicated.
34. Monogram of Catharine II. of Russia, in flowers, laurels, etc., on a service made for her. See text.
- 35, 36. *Visa* of Alexander Brongniart, the director, occurring on several fine pieces in the T.-P. collection. It does not appear as an intentional mark, but as if the artist's work had been submitted to the director, and he had written on the back with a lead-pencil *Vu Alex B* or *Vu B*. In the firing this has become a yellowish mark with some metallic iridescence.
37. Marks stencilled in red on a plate dated 1811, decorated with a view of the Palace of St. Cloud, signed *Lebel*. The *visa* of Brongniart in form of mark 36 is also on the plate. (T.-P. Coll.)
- Many hard-paste specimens of Sèvres which originally bore the marks of the Imperial period prior to 1814 are found with the letters M Imple, or the eagle, ground off on a wheel, leaving only the words DE SEVRES or SEVRES. The wheel has, of course, removed the glaze.

MARKS USED BY PAINTERS, DECORATORS, AND GILDERS
AT SÈVRES.

FIRST PERIOD. 1753-1799.

	<i>Aloncle</i> —birds, animals, emblems, etc.	MB	<i>Bunel, Madame</i> —another form.
	<i>Anteaume</i> —landscape, animals		<i>Buteux</i> (senior)—flowers, emblems, etc.
	<i>Armand</i> —birds, flowers, etc.		<i>Buteux</i> (elder son)—detached bouquets, etc.
	<i>Asselin</i> —portraits, miniatures, etc.		<i>Buteux</i> (younger son)—pastoral subjects, children.
	<i>Aubert</i> (senior)—flowers.		<i>Capel</i> —friezes.
	<i>Bailly</i> (son)—flowers.		<i>Curdin</i> —detached bouquets.
	<i>Bardet</i> —flowers		<i>Currier</i> —flowers.
	<i>Barre</i> —detached bouquets		<i>Custel</i> —landscapes, hunts, birds.
	<i>Burrat</i> —garlands, bouquets.		<i>Cuton</i> —pastoral subjects, children, birds.
	<i>Bruloïn</i> —ornaments, friezes, etc.		<i>Catrice</i> —flowers, detached bouquets.
	<i>Becquet</i> —flowers, etc.		<i>Chabry</i> —miniatures, pastoral subjects
	<i>Bertrand</i> —detached bouquets.		<i>Chanou, Madame</i> (née <i>Julie Durosey</i>)—flowers.
	<i>Bienfait</i> —gilding.		<i>Chapuis</i> (elder)—flowers, birds, etc.
	<i>Binet</i> —detached bouquets.		<i>Chapuis</i> (younger)—detached bouquets
	<i>Binet, Madame</i> (née <i>Sophie Chanou</i>)—flowers.		<i>Chauvaux</i> (father)—gilding.
	<i>Boucher</i> —flowers, garlands, etc.		<i>Chauvaux</i> (son)—detached bouquets, gilding.
	<i>Bouchet</i> —landscape, figures, ornaments.		<i>Chevalier</i> —flowers, bouquets, etc.
	<i>Bouillat</i> —flowers, landscapes.		<i>Choisy, De</i> —flowers, arabesques
	<i>Boulanger</i> —detached bouquets		<i>Chulot</i> —emblems, flowers, arabesques.
	<i>Boulanger</i> (son)—pastoral subjects, children.		<i>Comnelin</i> —detached bouquets, garlands.
	<i>Bulidon</i> —detached bouquets.		<i>Cornaille</i> —flowers, detached bouquets.
	<i>Bunel, Madame</i> (née <i>Manon Buteux</i>)—flowers.		































	<i>Couturier</i> —gilding.		<i>Heurion</i> —garlands, detached bouquets.
	<i>Dieu</i> —Chinese, Chinese flowers, gilding, etc.		<i>Héricourt</i> —garlands, detached bouquets.
	<i>Dodin</i> —figure, various subjects, portraits.		<i>Hillen</i> —figures, pastoral subjects, etc.
	<i>Drand</i> —Chinese, gilding.		<i>Houry</i> —flowers, etc.
	<i>Dubois</i> —flowers, garlands, etc.		<i>Huny</i> —flowers, detached bouquets.
	<i>Dusolle</i> —detached bouquets, etc.		<i>Joyau</i> —detached bouquets, etc.
	<i>Dutanda</i> —detached bouquets, garlands.		<i>Jubin</i> —gilding.
	<i>Evans</i> —birds, butterflies, landscapes.		<i>La Roche</i> —flowers, garlands, emblems.
	<i>Falot</i> —arabesques, birds, butterflies		<i>La Roche</i> —another form.
	<i>Fontaine</i> —emblems, miniatures, etc.		<i>Le Bel</i> (elder)—figures and flowers.
	<i>Fontelliau</i> —gilding, etc.		<i>Le Bel</i> (younger)—garlands, bouquets, etc.
	<i>Fouré</i> —flowers, bouquets, etc.		<i>Léandre</i> —pastoral subjects, miniatures.
	<i>Fritsch</i> —figures, children.		<i>Lecot</i> —Chinese, etc.
	<i>Furnez</i> —detached bouquets.		<i>Lecot</i> —another form.
	<i>Furnez</i> —another form.		<i>Ledoux</i> —landscape and birds.
	<i>Gauthier</i> —landscape and animals.		<i>Le Guay</i> —gilding.
	<i>Genest</i> —figure and genre		<i>Le Guay</i> —another form.
	<i>Genin</i> —flowers, garlands, friezes, etc.		<i>Leguay</i> —miniatures, children, Chinese.
	<i>Gerard</i> —pastoral subjects, miniatures.		<i>Levé</i> (father)—flowers, birds, arabesques.
	<i>Gerard, Madame</i> (née <i>Vautrin</i>)—flowers.		<i>Levé, Felix</i> —flowers, Chinese.
	<i>Girard</i> —arabesques, Chinese, etc.		<i>Maqueret, Madame</i> (née <i>Bouillat</i>)—flowers.
	<i>Gomery</i> —flowers and birds.		<i>Massy</i> —groups of flowers, garlands.
	<i>Gromont</i> —garlands, bouquets.		<i>Merault</i> (elder)—friezes.
	<i>Grisson</i> —gilding.		<i>Merault</i> (younger)—bouquets, garlands.
			<i>Micaud</i> —flowers, bouquets, medallions.

<i>m</i>	<i>Michel</i> —detached bouquets.		<i>Rochet</i> —figure, miniatures, etc.
<i>M</i>	<i>Moiron</i> —detached bouquets; also another form used by <i>Michel</i> .		<i>Rosset</i> —landscape, etc.
<i>5.</i>	<i>Mongenot</i> —flowers, detached bouquets	<i>R.L.</i>	<i>Roussel</i> —detached bouquets.
<i>M</i>	<i>Morin</i> —marine, military subjects.	<i>S. h.</i>	<i>Schradre</i> —birds, landscape, etc.
	<i>Mutel</i> —landscape.		<i>Sinsson</i> —flowers, groups, garlands, etc.
<i>ng</i>	<i>Niquet</i> —detached bouquets, etc.		<i>Sioux</i> (elder)—detached bouquets, garlands.
	<i>Noel</i> —flowers, ornaments.		<i>Sioux</i> (younger)—flowers, garlands.
<i>SD</i>	<i>Nonallhier, Madame</i> (née <i>Sophie Dursey</i>)—flowers.		<i>Tabary</i> —birds, etc.
<i>P</i>	<i>Parpette</i> —flowers, detached bouquets.		<i>Taillandier</i> —detached bouquets, garlands.
<i>L.B.</i>	<i>Parpette, Dlle. Louison</i> —flowers.		<i>Tandart</i> —groups of flowers, garlands.
	<i>Payou</i> —figure.		<i>Tardi</i> —detached bouquets, etc.
<i>P.T.</i>	<i>Petit</i> —flowers.		<i>Theodore</i> —gilding.
<i>f</i>	<i>Pfeffer</i> —detached bouquets.		<i>Thevenet</i> (father)—flowers, medallions, groups, etc.
<i>po.</i>	<i>Pierre</i> (elder)—flowers, bouquets.	<i>Jt.</i>	<i>Thevenet</i> (son)—ornaments, friezes, etc.
<i>p. 7.</i>	<i>Pierre</i> (younger)—bouquets, garlands.	<i>V</i>	<i>Vandé</i> —gilding, flowers.
<i>P.H.</i>	<i>Philippine</i> (elder)—pastoral subjects, children, etc.	<i>W</i>	<i>Vasseuseur</i> —arabesques.
<i>P.t.</i>	<i>Pithou</i> (elder)—portraits, historical subjects.		<i>Viellard</i> —emblems, ornaments, etc.
<i>P.j.</i>	<i>Pithou</i> (younger)—figures, flowers, ornaments.	<i>2.000</i>	<i>Vincent</i> —gilding.
	<i>Pouillot</i> —detached bouquets.		<i>Xrowet</i> —arabesques, flowers, etc.
<i>HP.</i>	<i>Prevost</i> —gilding.		<i>Yvernel</i> —landscape, birds.
<i>3...</i>	<i>Raux</i> —detached bouquets.		

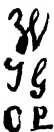
SECOND PERIOD. 1800-1874.

<i>J.A</i>	<i>André, Jules</i> —landscape.	<i>A</i>	<i>Archelais</i> —ornament worker (pâtes sur pâtes)
<i>P</i>	<i>Apoil</i> —figures, subjects, etc.	<i>P.A</i>	<i>Avisse</i> —ornament worker.
<i>E.A.</i>	<i>Apoil, Madame</i> —figure.	<i>B</i>	<i>Barbin</i> —ornaments.

B	<i>Barré</i> —flowers.	D. Z	<i>Drouet</i> —flowers.
B.	<i>Barriat</i> —figure.	A Z	<i>Ducluzeau, Madame</i> —figure, subjects, portraits, etc.
B. n	<i>Beranger</i> —figure.	D y	<i>Durosey</i> —gilding.
B	<i>Blanchard</i> —decorator	HF	<i>Farraguet, Madame</i> —figure, subjects, etc.
AB	<i>Blanchard, Alex.</i> —ornament worker.	F	<i>Frequet</i> —flowers and ornaments (pâtes sur pâtes)
B. Z	<i>Boitel</i> —gilding.	F	<i>Fontaine</i> —flowers
B	<i>Bonnuit</i> —decorator	zhz	<i>Fragonard</i> —figure, genre, etc.
B	<i>Boullemier, Antoine</i> —gilding.	Gu	<i>Ganeau (son)</i> —gilding.
B. B	<i>Boullemier (elder)</i> —gilding.	I. G	<i>Gély</i> —ornament worker (pâtes sur pâtes).
Bf	<i>Boullemier (son)</i> —gilding.	g. g.	<i>Georget</i> —figure, portraits, etc.
Bx.	<i>Buteux</i> —flowers	Gob. R	<i>Gobert</i> —figure on enamel and on pastes.
E	<i>Cabau</i> —flowers.	D. g.	<i>Godin</i> —gilding
CP	<i>Capronnier</i> —gilding.	E. g.	<i>Goupl</i> —figure.
IC	<i>Célos</i> —ornament worker (pâtes sur pâtes)	E	<i>Guillemain</i> —decorator.
LC	<i>Charpentier</i> —decorator	H	<i>Hallion, Eugène</i> —landscape.
F. C.	<i>Charrin, Dlle. Fanny</i> —figures, subjects, portraits.	H	<i>Hallion, François</i> —decorator in gilding
C. C.	<i>Constant</i> —gilding.	h. d.	<i>Huard</i> —ornaments, divers styles.
C. Z.	<i>Constantin</i> —figure.	. C. h.	<i>Humbert</i> —figure.
A	<i>Dammouse</i> —figure, ornament (pâtes sur pâtes)	E	<i>Julienne</i> —ornaments, style Renaissance, etc.
A	<i>David</i> —decorator.	H	<i>Lambert</i> —flowers.
D. F.	<i>Dela fosse</i> —figure.	E g	<i>Langlacé</i> —landscape.
D. F.	<i>Davignon</i> —landscape.	E	<i>Latache</i> —gilding.
D. d.	<i>Desperais</i> —ornaments.	L. B.	<i>Le Bel</i> —landscape.
DE	<i>Derichsweiler</i> —decorator.	L	<i>Legay</i> —ornament worker (pâtes sur pâtes).
CD	<i>Develly</i> —landscape and genre.	L. g.	<i>Le Gray</i> —figures, various subjects, portraits.
D h	<i>Deutsch</i> —ornaments.	lg	<i>Légrand</i> —gilding.
D. I.	<i>Didier</i> —ornaments, etc.	EL	<i>Leroy, Eugène</i> —gilding.
D.	<i>Didier</i> —another form.		

	<i>Martinet</i> —flowers.		<i>Richard, François</i> —decorator.
<i>E. de M.</i>	<i>Maussion, Adèle de</i> —figure.	<i>J. h. R.</i>	<i>Richard, Joseph</i> —decorator.
	<i>Merigot</i> —ornaments, etc.		<i>Richard, Paul</i> —decorative gilding
	<i>Meyer, Alfred</i> —figure, etc.		<i>Riocreux, Isidore</i> —landscape.
	<i>Micaud</i> —gilding.		<i>Riocreux, Désiré-Denis</i> —flowers.
	<i>Milet, Optat</i> —decorator on faience and pastes.		<i>Robert, Pierre</i> —landscape.
	<i>Moreau</i> —gilding.		<i>Robert, Madame</i> —flowers and landscape
	<i>Moriot</i> —figure, etc.		<i>Robert, Jean-François</i> —landscape.
	<i>Parpette, Dlle</i> —flowers.		<i>Roussel</i> —figure, etc.
	<i>Phalippine</i> —flowers and ornaments		<i>Schilt, Louis-Pierre</i> —flowers.
	<i>Plins</i> —decorative gilding.		<i>Sinsson</i> (father)—flowers.
	<i>Poupart</i> —landscape.		<i>Solon</i> —figures and ornaments (pâtes sur pâtes).
	<i>Regnier, Ferd.</i> —figure, various subjects.		<i>Suebach</i> —landscape and genre.
	<i>Regnier, Hyacinthe</i> —figure.		<i>Trager</i> —flowers, birds.
	<i>Rejoux</i> —decorator		<i>Troyon</i> —ornaments.
	<i>Renard, Émile</i> —decorator.		<i>Walter</i> —flowers
	<i>Richard, Émile</i> —flowers		
	<i>Richard, Eugène</i> —flowers.		

UNDETERMINED SIGNATURES, ETC.



Three marks on plate dated 1821, view of Moka, signed L. M., richly gilded. The first mark also on several plates dated 1812, lapis-lazuli borders, heavy gilding, antique cameo paintings.

M

On richly decorated and gilded plates, 1821.

Racine

On plate, time of Louis XVIII., richly gilded; monochrome portrait of Racine: (probable mark of Philippine.)

D^m Rog^d

On plate not dated, rich gilding, monochrome portrait of Bourdaloue.

BT

On fine plates and vases, 1812.

D^{lle} TreOn plate *temp.* Louis XVIII., rich gilding, monochrome portrait of Bourdon (? Dlle. de Treverret).

R

Twice this size on plate, 1822, view of Sèvres factory; possibly a *visa* of Riocreux.

Lp

In black on foot of ice-vase, with river deities in superb gilding, dated 1831.

ARTISTS' SIGNATURES FOUND AT FULL LENGTH.




Baldisseroni—figure.*Brunel*—figure.*Bulot*—flowers.*Cool, Madame de*—figure.*Courcy, De*—figure.*Froment*—figure.*Gallois, Madame* (née *Durand*)—figure.*Garneray*—landscape.*De Gault*—figure.*Goddé*—decorator, enamels, and relief.*Hamon*—figure.*Jacober*—flowers and fruits.*Jacquotot, Madame Victoire*—figure, subjects, portraits.*Jadelot, Madame*—figure.*Lamarre*—landscape.*Langlois, Polycles*—landscape.*Laurent, Madame Pauline*—figure, subjects, etc.*Lessore*—figure, etc.*Meyer-Heine*—figure and ornaments on enamel.*Parant*—figure, etc.*Philip*—decorator on enamel.*Schilt, Abel*—figure, subjects, portraits.*Solon, Dlle.*—figure, subjects.*Treverret, Dlle. de*—figure.*Van Os*—flowers and fruits.*Van Marck*—landscape.

MARKS USED AT SÈVRES TO INDICATE DATES OF MANUFACTURE.


A (Vincennes).....	1753	N.....	1766
B ".....	1754	O.....	1767
C ".....	1755	P.....	1768
D.....	1756	Q.....	1769
E.....	1757	R.....	1770
F.....	1758	S.....	1771
G.....	1759	T.....	1772
H.....	1760	U.....	1773
I.....	1761	V.....	1774
J (see foot-note).....	1762	X.....	1775
K.....	1763	Y.....	1776
L.....	1764	Z.....	1777
M.....	1765		

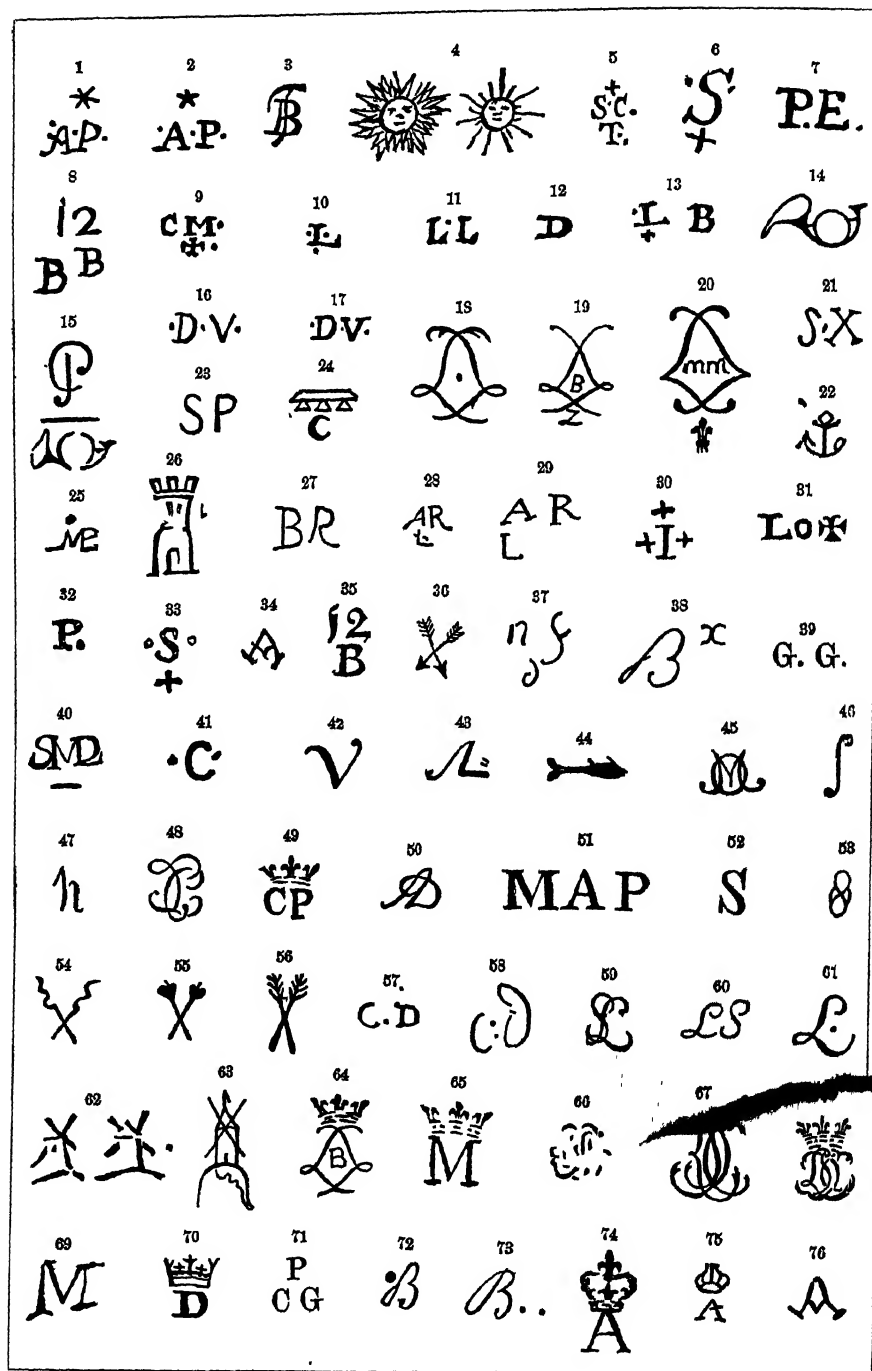
AA.....	1778	JJ.....	1787
BB.....	1779	KK.....	1788
CC.....	1780	LL.....	1789
DD.....	1781	MM.....	1790
EE.....	1782	NN.....	1791
FF.....	1783	OO.....	1792
GG.....	1784	PP.....	1793
HH.....	1785	QQ.....	1794
II.....	1786	RR.....	1795

This mode of marking the date fell into disuse, and, from this period until 1800, it is found only on rare examples. In 1801, the custom of dating was resumed, and the letters replaced by the following signs :

T. 9.....	An IX. (1801)	9.....	1809
X.....	" X (1802)	10.....	1810
11.....	" XI. (1803)	oz. (onze).....	1811
	" XII. (1804)	d. z. (douze).....	1812
	" XIII. (1805)	t. z. (treize).....	1813
	" XIV. (1806)	q. z. (quatorze).....	1814
7.....	1807	q. n. (quinze).....	1815
8.....	1808	s. z. (seize).....	1816
		d. s. (dix-sept).....	1817

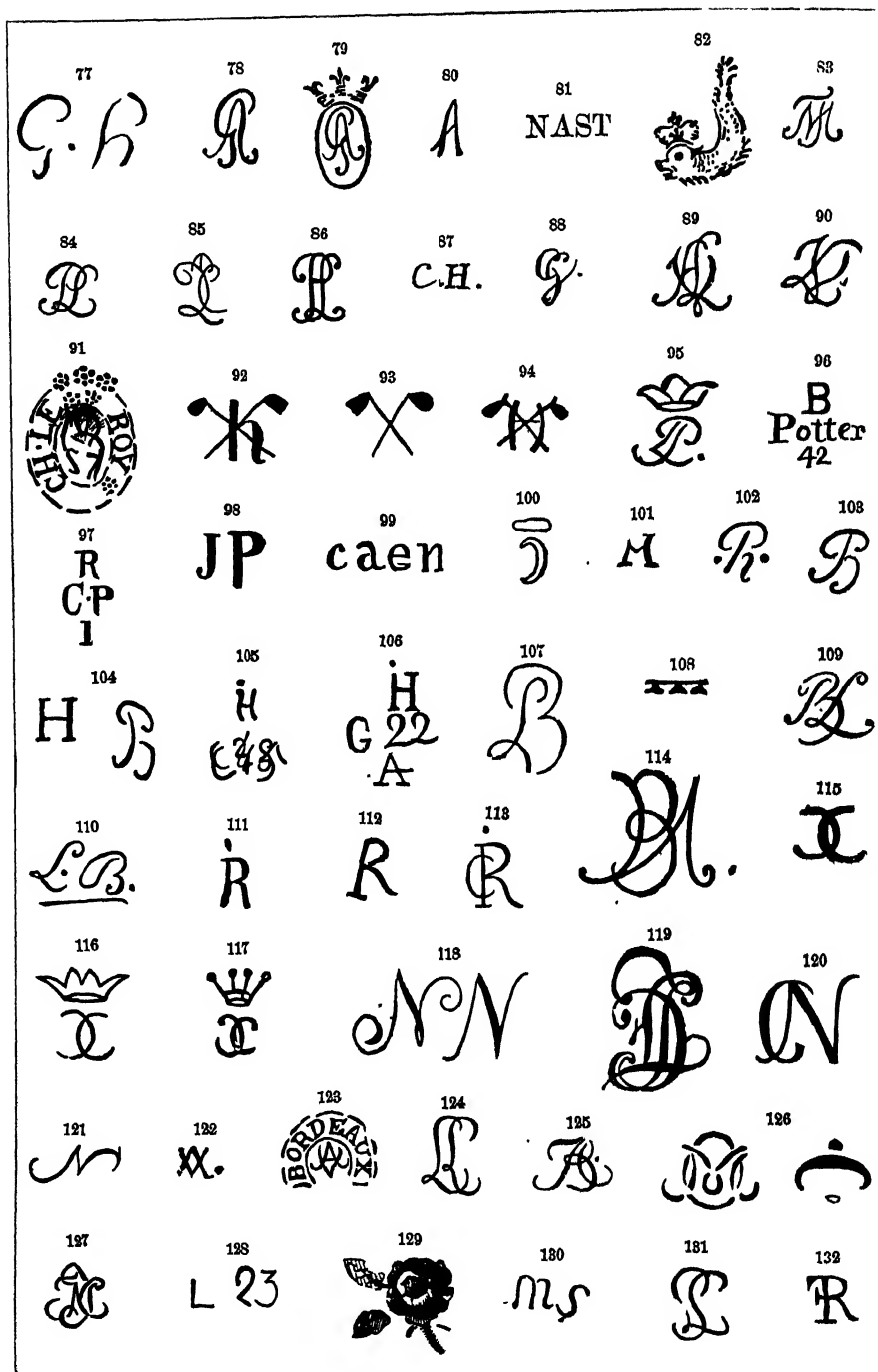
From 1818 the year is expressed by the two last figures only. Thus: 18=1818, 19=1819, etc., and is so continued to the present time.

NOTE.—The *Guide* published for the Sèvres factory still adheres to the old system of dates, which rejected the letter J, and regards K as 1762, and the letters which follow representing, L, 1763, and so on. This system is abandoned by all authorities, French and English, and we do not know why it is retained in the *Guide*. In addition to the above tables, it is necessary to add that 1811, 1812, 1813 are sometimes indicated by 11, 12, 13, and possibly other years were occasionally so indicated to 1817: 1799, the year of a comet, was sometimes indicated by a comet rudely painted, instead of Q. 

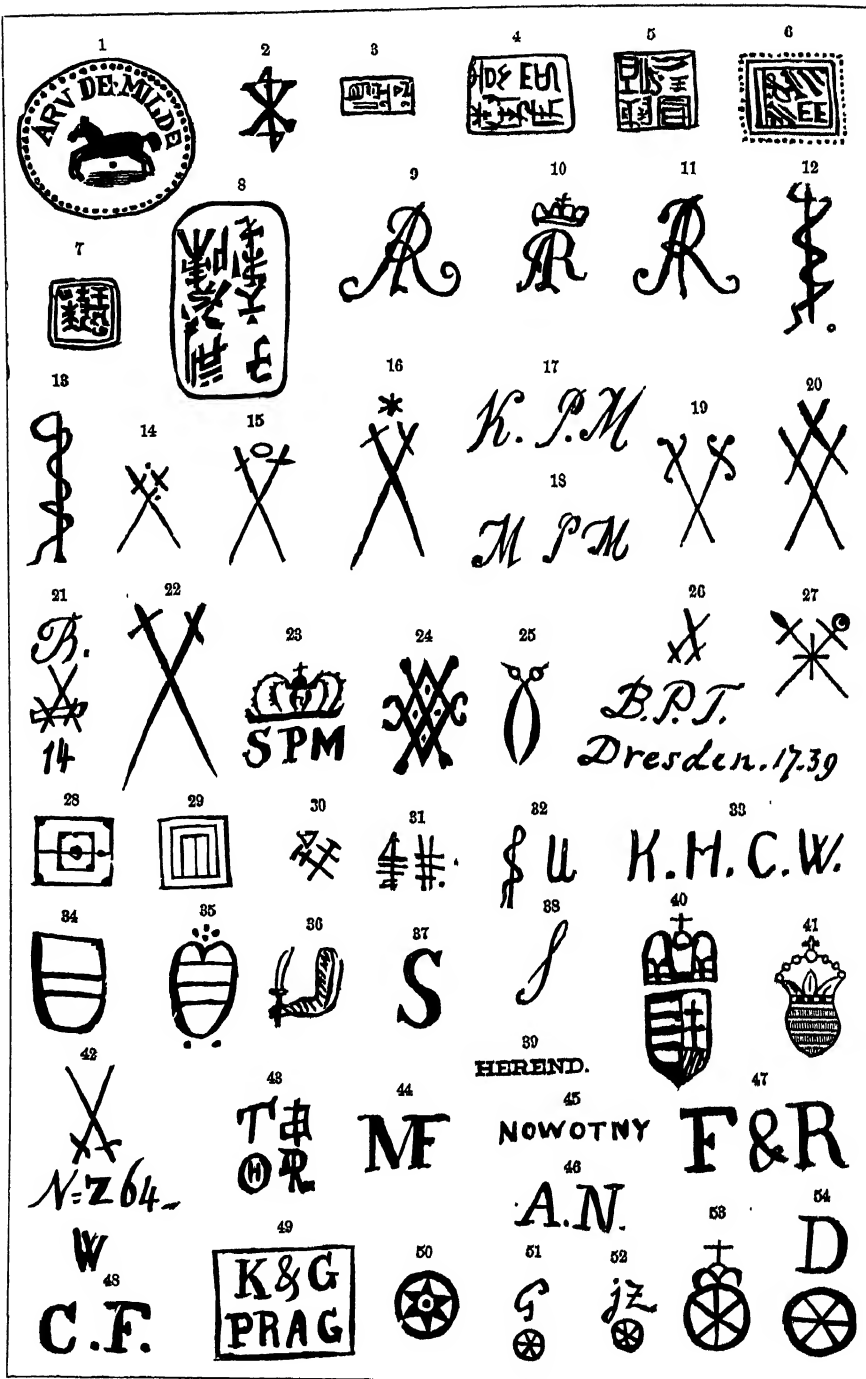


PORCELAIN OF FRANCE.

- 1, 2. Unknown marks on early French porcelains, given by Jacquemart as possibly Louis Poterat, of Rouen, 1673-1711.
3. Unknown, on similar porcelain.
4. ST. CLOUD. Two forms. *Pierre Chicanneau*, 1702-'15.
5. ST. CLOUD. Trou, 1706.
- 6, 7, 8. Uncertain. On porcelains resembling St. Cloud.
9. PARIS. *Marie Moreau*, widow of *Chicanneau's* son.
- 10-13. LILLE. 10 is the earliest mark. In 13 L is on a saucer, and B on the cup.
- 14, 15. CHANTILLY. 15 is *Pigorry's* mark since 1803.
- 16, 17. MENNECY-VILLEROY. In gold, color, and, later, impressed.
- 18, 19, 20. VINCENNES and SÈVRES. See marks of Sèvres, p. 472.
- 21, 22, 23. SCEAUX. 21 usually scratched. 22, later, painted in blue. 23 scratched.
24. ORLEANS.
25. ETIOILLES.
26. LA TOUR D'AIGUES.
27. BOURG-LA-REINE.
- 28, 29. ARRAS.
- 30-39. Unknown marks on early French porcelains, resembling St. Cloud, given by Jacquemart. 33, 35 are doubtless the same as 6, 8, above.
- 40-46. Unknown marks on hard-paste porcelains. 44 attributed by *Riocreux* to *Fontainebleau*. 45 resembles the mark of a Sèvres painter.
47. Paris. *Pierre A. Hannong's* mark, 1773.
- 48, 49. Paris. Same factory. *Charles Philippe*.
50. Paris. *Gros Caillou*. Established by *Lamarre*, 1773.
51. Paris. *Morelle à Paris*. Established 1773.
- 52, 53. Paris. *Souroux*, potter. Established 1773. His successor was *Ollivier*.
54. Paris. *De la Courtille* factory.
55. Paris. *De la Courtille*. This mark, torches or headless arrows, is made in various forms, and sometimes resembles the Dresden crossed swords.
56. Paris. *Dubois*. This mark—two branches, alluding to the maker's name—often resembles the previous one. Also assigned to *De la Courtille* factory.
- 57, 58. LIMOGES. Factory of *Massie*. The earliest mark was *G. R. et Cie*.
- 59, 60. LA SEINIE. Established 1774.
61. Paris. *J. J. Lassia*, 1774.
- 62-70. CLIGNANCOURT. The windmill is the earliest mark, rare, used only in 1775. 64 is stencilled on a specimen. 65, initial of *Monsieur*, the king's brother; 66, 67, 68, initials of *Prince Louis Stanislas Xavier*; 69, initial of *Moitte*, director, used with the name *Clignancourt*; 70, initial of *Deruelle*, director.
71. Paris. *Manufacture du petit Carousel*. Mark used with the name of the factory variously abbreviated.
- 72, 73. BOISSETTE.
- 74, 75, 76. Paris. *Lebeuf*. *Porcelaine de la Reine*. Initial of *Marie Antoinette*.

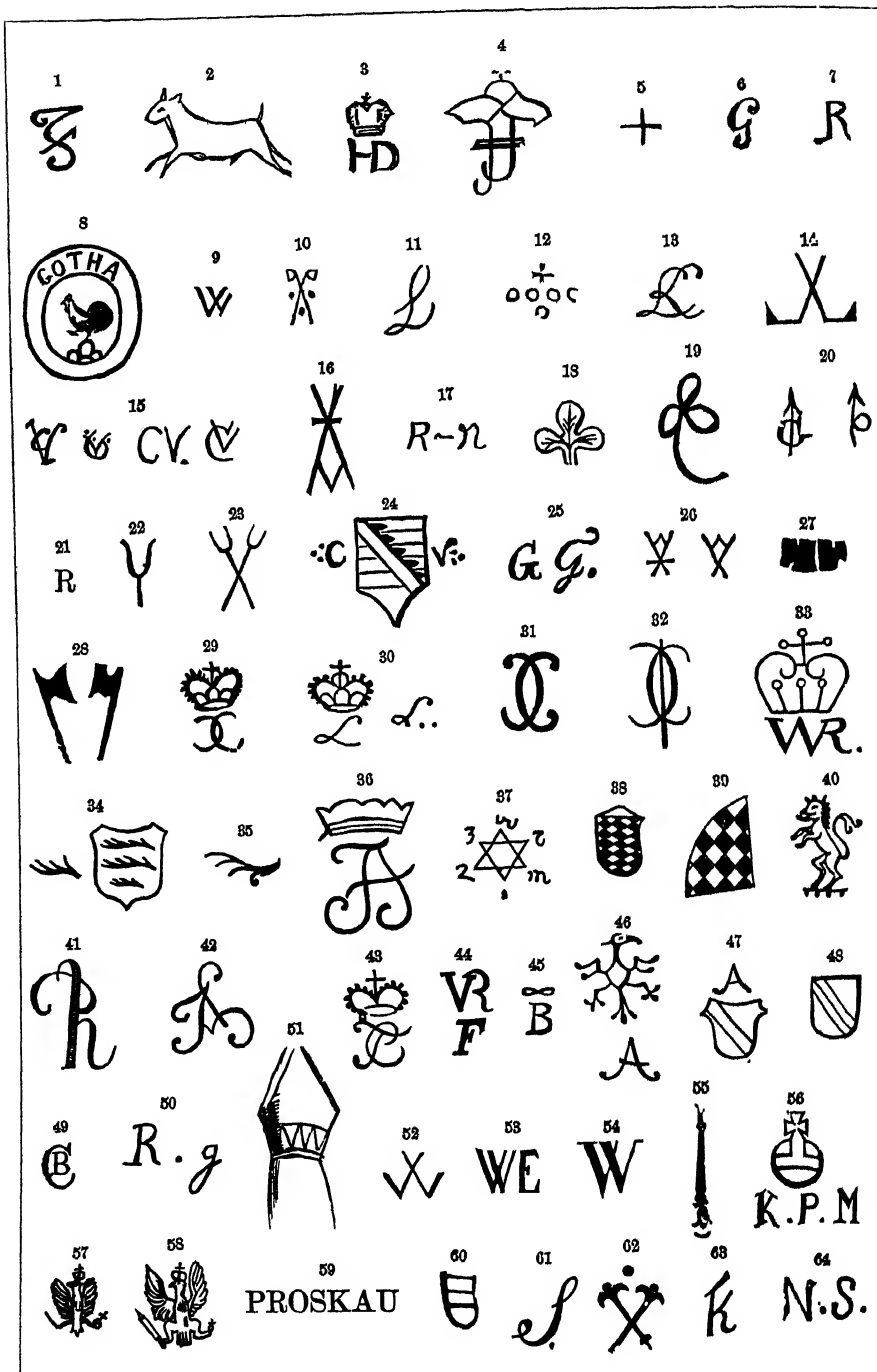


77. Paris. *Porcelaine de la Reine*. Initials of Guy & Housel, successors to Lebeuf. These occur with *Rue Thirou à Paris*. LEVÈILLE, 12 *Rue Thiroux*, is the latest mark.
- 78, 79, 80. Paris. *Porcelaine d'Angoulême*. Early marks of *Guerhard & Dihl*. Later marks are their names in full, and MANUFACTURE DE MONS. LE DUC D'ANGOULEME À PARIS, without name.
81. Paris. *Nast*, manufacturer. Stencilled.
82. LILLE. The early pieces have à *Lille*.
- 83, 84, 85, 86. Paris. Factory established by Lamarre, 1784. 84, 85, 86, are initials of Louis Philippe Joseph, Duc d'Orleans, patron.
- 87, 88. Paris. H. F. Chanou. Established 1784. The marks are pencilled in red.
- 89, 90. VALENCIENNES. Initials of Fauquez, Lamoinary, and V. Early mark, *Valencien*.
91. CHOISY LE ROY. Impressed.
- 92, 93, 94. Vincennes. Factory of P. A. Hannong. Established 1786.
95. Vincennes. Attributed to Hannong's, or another factory under the patronage of Louis Philippe.
- 96, 97. Paris. Charles Potter. *Porcelaine du Prince de Galles*.
98. Paris. Belleville. Jacob Pettit. The J has sometimes a dot above it.
99. CAEN. Desmare et Cie. Established 1798.
100. Paris. *Manufacture de S. M. l'Impératrice*. Also marked with full name of factory, and P. L. Dagoty, proprietor.
- 101–106. STRASBOURG. 101, C. Hannong; 102, 103, Paul A. Hannong; 104, the same, with H in the paste; 105, J. A. Hannong, with numbers; 106, J. A. Hannong.
107. BRANÇAS LAURAGAIS.
- 108, 109. ORLEANS. 108, of Gerault; 109, of Le Brun.
110. Given by Jacquemart as the mark of Jacques Louis Broiliet on experimental porcelain, at *Gros Caillou* (Paris), 1765.
- 111, 112, 113. MARSEILLES. Robert. 113 is doubtful.
- 114–121. NIDERVILLER. 114, Beyerle's period; 115, 116, 117, 120, Custine's period. These marks must not be confused with Ludwigsburg. 119 is Lanfray's cipher. NIDERVILLE in an open outlined letter is impressed on statuettes of Franklin and other biscuit pieces.
- 122, 123. BORDEAUX. Marks of Verneuille.
124. Unknown French. Resembles Limbach, in Germany.
- 125–131. Unknown marks on French porcelain.
132. Attributed by Baron Davillier to Marseilles.

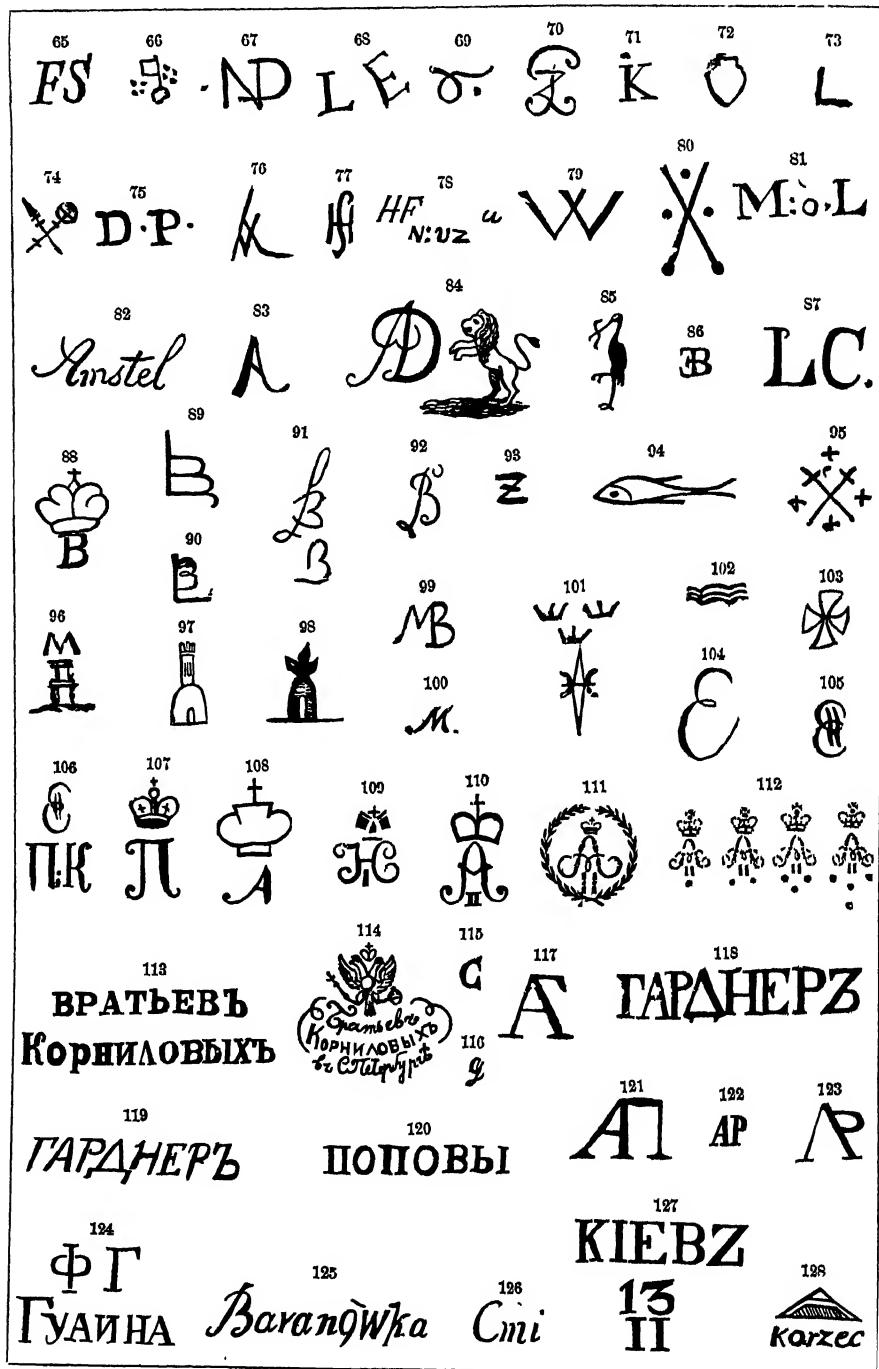


PORCELAIN OF GERMANY, ETC.

- 1-8. DRESDEN. Marks stamped on Böttcher red ware.
- 9, 10, 11. Dresden. Initials of Augustus Rex, in blue and in gold, 1709-'26.
- 12, 13. Dresden. Caduceus mark, on early pieces made for sale, 1717-'20.
- 14, 15. Dresden. King's period, from 1770; the mark with O about 1778.
16. Dresden. Crossed swords, with star. Marcolini period, from 1796.
- 17, 18. Dresden. Early marks for (17) *Königlicher* or (18) *Meissener Porzellan Manufactur*.
- 19, 20. Dresden. First forms of the crossed swords, used from 1719.
21. Dresden. Bruhl's time, 1750.
22. Dresden. Crossed swords; modern mark. The earliest form, in Horoldt's period, sometimes closely resembled the modern form.
23. Dresden. A modern mark.
24. Dresden. On a service made for the Countess Cosel.
25. Dresden. Used about 1730.
26. Dresden. Dated 1739.
27. Dresden. Early form of mark.
- 28, 29. Dresden. Marks used 1718.
- 30, 31. Dresden. Early marks.
32. Dresden. Mark used 1718.
33. Dresden. Date of use unknown; on statuettes, with or without the crossed swords. (Chaffers.)
- 34, 35. VIENNA, Austria.
36. ELBOGEN.
- 37, 38. SCHLAKENWALD, Austria. See p. 488, mark 61.
- 39-44. HEREND, Hungary. 39 is impressed in the paste; 40, 41, usually printed in blue; 42, painted in black, with *Herend* impressed; 43, painted in red; 44, initials of M. Fischer.
- 45, 46. ALTEN ROTHAU. *Nowotny*, maker.
- 47, 48. PIRKENHAMMER. *Fischer & Reichembach*, and *Charles Fischer*.
49. PRAGUE. *Kriegel & Co*.
- 50-53. HÖCHST, Mayence. See p. 467. 51 is the mark of Geltz; 52, of Zeschinger.
54. Höchst. Mark of Dahl.



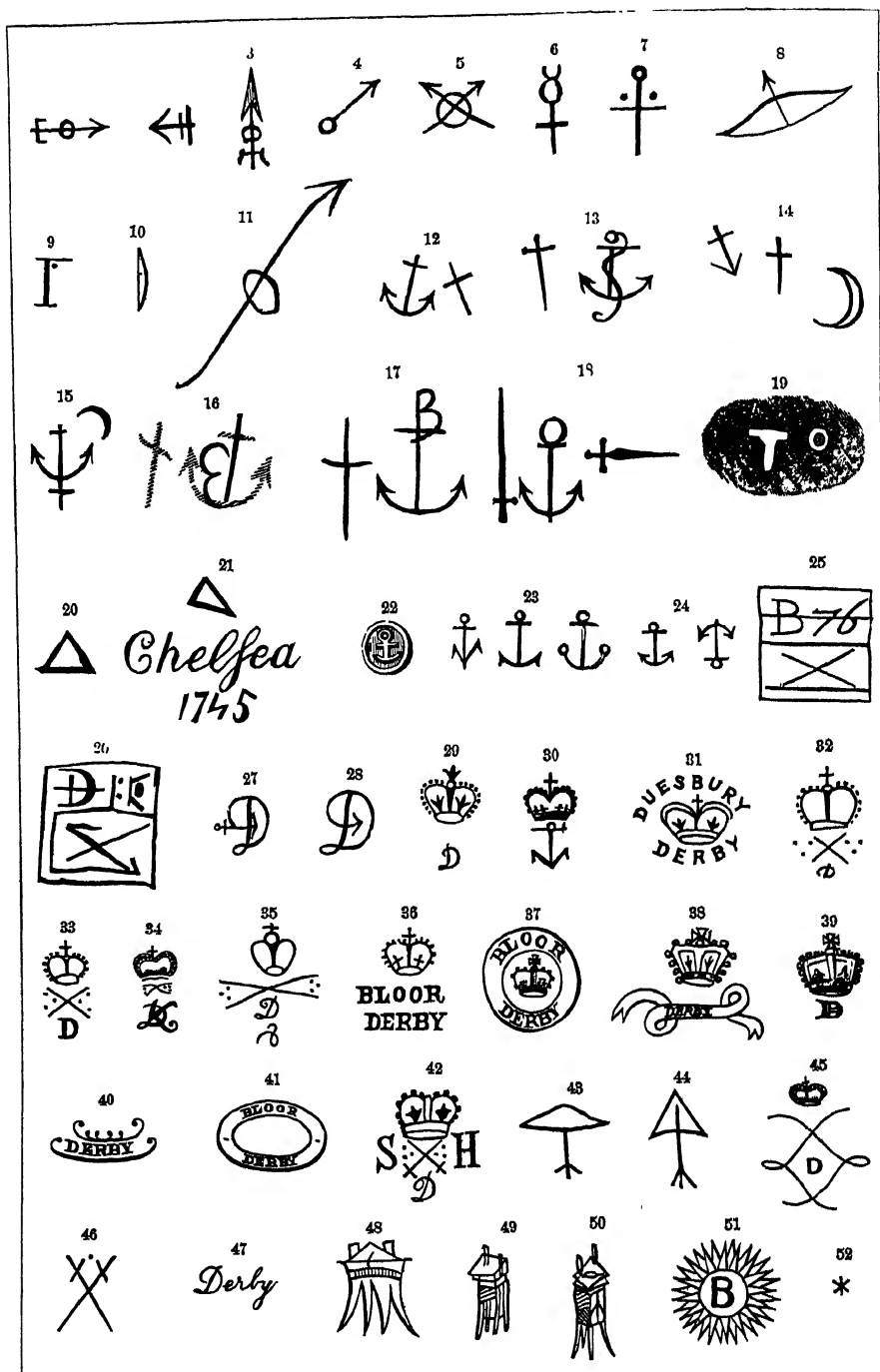
1. FURSTENBERG. The F is made in various forms.
2. HESSE CASSEL?
3. HESSE DARMSTADT. (Jacquemart.)
- 4, 5. FULDA.
6. GERA? or GOTH? See 25.
- 7, 8. Gotha.
9. WALLENDORF. (Also used at Berlin.)
10. ARNSTADT.
- 11, 12, 13, 14. LIMBACH.
26. Attributed to Gera and to Anspach; probably the latter. Chaffers gives it with a D under a crown. The mark varies from a rude eagle (46) to this form. See 16.
- 27, 28. BADEN-BADEN. The blade of an axe or two axes, in gold or impressed.
- 29-35. LUDWIGSBURG (KRONENBURG). The double C is the cipher of Charles Eugene, who died 1793, but the mark was used till 1806. It must not be confounded with that of Niderviller, in Custine's time, which was sometimes accompanied by a coronet. The mark frequently appears without the crown, as in 31 and 32. The form 30 (L, with a crown) is also a mark of the time of Charles Eugene. The letters C C in mark 29 were changed in 1806 to T. R., the T. R. being sometimes in monogram; and in 1818 the letters W. R. were substituted. The stag's horns, singly, 35, or on a shield, as in 34, were also used.
36. HILDESHEIM, Hanover. Sometimes the letter A only; from about 1760.
- 37, 38, 39. NYMPHENBURG and NEUDECK. The first is the oldest mark. These are impressed, without color, and sometimes difficult to recognize. Found on pieces with marks of other factories, which bought and decorated them.
- 40-45. FRANKENTHAL. 41, P. A. Hannong's mark; 42, Joseph A. Hannong; 43, initials of Carl Theodore, Elector; 44, supposed, of Ringler; 45, supposed, of Bartolo.
- 46, 47, 48. Anspach, in Bavaria.
49. BAIREUTH.
- 52-57. BERLIN. The sceptre is the general mark, made in several forms. 52, 53, 54 are the earliest marks of *Wegeley*, 1750-'61; 56, globe and cross and K. P. M., for *Königlicher Porzellan Manufactur*, adopted about 1830; 57, modern mark, alone, and with K. P. M. The *Wegeley* marks resemble Wallendorf and others.
58. CHARLOTTENBERG.
59. PROSKAU.
60. VIENNA. See p. 486 for other forms of the shield.
15. VOLKSTADT. Marryat says KLOSTER VEILSDORF. See 24, below.
16. ANSPACH. So says Marryat. See 26, 46, 47, 48, below.
17. RAUENSTEIN.
- 18, 19. GROSBREITENBACH.
20. Grosbreitenbach?
- 21, 22, 23. RUDOLSTADT. R was used in various forms.
24. Volkstadt. See 15, above.
25. Gera. Two forms of G.
50. REGENSBURG (RATISBON).
51. WURZBURG, Bavaria.
61. SCHLAKENWALD, Austria. See page 486 for other forms.
- 62, 63, 64. Unknown marks on German hard-paste porcelain.



- 65-76. Unknown marks on German hard-paste porcelain.
 77, 78. Uncertain; possibly Frankenthal, *Hannong fecit*.
 79. WEESP, Holland.
 80. Weesp? Arnstadt? Saxe Gotha? Uncertain.
 81. LOOSDRECHT. Manufactur oude Loosdrecht.
 82, 83. AMSTEL (Amsterdam).
 84. AMSTERDAM. The lion frequently alone.
 85. THE HAGUE.
 86, 87, 88. BRUSSELS. 87 is mark of L. Cretté.
 89-92. LUXEMBOURG. 93 is the modern mark.
 93. ZURICH, Switzerland.
 94. NYON, Switzerland.
 95-98. TOURNAY. 95 is Peterynck's mark from 1751; the tower is also assigned to Vincennes, and pieces thus marked are called "Porcelaine de la tour."
 99, 100, 101. MARIEBERG, Sweden.
 102, 103. COPENHAGEN. Three waving lines for the Sound and the Belts.

POTTERY AND PORCELAIN OF RUSSIA, ETC.

- 104-112. St. PETERSBURG. Royal factory; 104, time of Empress Elizabeth, 1741; 105, 106, Empress Catharine (Ekaterina), 1762; 107, Emperor Paul, 1796; 108, Emperor Alexander, 1801; 109, Emperor Nicholas, 1825; 110, 111, Emperor Alexander II., 1855; 112, shows system of dates by dots adopted 1871—one dot for 1871, two for 1872, etc.
 113, 114. St. Petersburg. Brothers Korniloff.
 115-119. MOSCOW. Gardners.
 120-123. MOSCOW. Popoff. Factory established 1830.
 124. KIEV, Russia, or near there at Mejigorié. Pottery.
 125. BARANOWKA, Poland. Pottery.
 126. CHMELOFF, Poland. Pottery.
 127. KIEV, Russia. Pottery.
 128. KORZEC, Poland. Pottery.



POTTERY AND PORCELAIN OF ENGLAND.

- 1-18. Bow. Scratched marks, resembling 4, 11, and other unintelligible scratches occur. Other marks are in color, sometimes as in 14, 15, 16, 18, in two colors.
19. Bow? Bristol? Impressed mark. Uncertain.
- 20, 21. CHELSEA. The triangle impressed was formerly assigned to Bow till discovery of piece with mark 21. It is on an English pottery teapot in the T.-P. collection.
22. CHELSEA. Anchor embossed. Early mark.
- 23, 24. Chelsea. Forms of the anchor mark in colors or gold. The anchor was used by many other factories.
- 25, 26. Uncertain. Bow?
- 27, 28. DERBY. Chelsea-Derby period.
- 29, 30. Derby. Crown-Derby period. 30 supposed to be mark on pieces made at Chelsea, after the purchase by Duesbury, and before closing the works.
31. Derby. A mark of Duesbury's time, date unknown.
- 32, 33, 34, 35. Marks used from about 1788. The earliest in puce or blue, later in red. 34 is of Duesbury & Kean.
36. Derby. Bloor's mark, 1825-'30.
- 37-41. Derby. Bloor's marks.
42. Derby. Modern mark of S. Hancock, present owner.
- 43, 44. Derby? Uncertain marks on pieces resembling Derby.
- 45, 46. Derby. Copies of Sèvres and Dresden marks on Derby porcelain.
47. Derby. On a statuette.
- 48-52. Derby. 48, 49, 50 are imitations of a Chinese symbol. 51 is uncertain, perhaps of Bloor's time. 52, a star, often impressed on figures.

53
A54
A55
X56
C57
#58
T59
60
61
62
63
No 21364
CHANTILLY
65
66
67
D68
69
W. F. Coffee70
71
No 19
0
5272
X73
0074
B
O75
Cocker76
77
78
X79
80
81
82
R83
C C C C C C C C84
S S S S S85
SALOPIAN86
S
X
*87
TURNER88
89
90
91
92
93
94
95
96
97

-
- 53-57. Bow? These marks occur in blue on figures.
58. Bow? Supposed monogram of Fry in blue.
59. Bow? Impressed.
60. DERBY. On service made for the Persian ambassador.
61. Derby. On a plate.
62. Derby. Used in 1842. Imitation of Sèvres.
- 63-76. Derby. On various pieces. 71-75 are marks of Cocker, on figures, etc., made by him at Derby till 1840, and after that in London ; 76 is an imitation of a Sèvres mark.
- 77-82. WORCESTER. Workmen's marks on Worcester porcelain.
83. CAUGHLEY. Forms of the crescent mark, and C in blue.
84. Caughley. Forms of S, for Salopian, in blue or impressed.
85. Caughley.
- 86, 87. Caughley.
- 88-96. Caughley. Numerals 1, 2, 3, etc., in fanciful style on printed wares.
97. Caughley. Mark of Rose?

98
*Goodport*99
*C Dale*100
*CD*101
*D*102
*B*103
*E*104
C
↓105
*New Hall*106
Pinxton
343107
P
*N 300*108
*P*109
*P N*110
*P*111
*1**2**3**4**5**6**7**8*9
*9**10**11**12**13**14**15**16**17*112
*W W W W W*113
C C C C C117
*R Kanech fuit*118
*H. Worcester*119
*H*120
*H*121
*T*122
*H H H*123
*H H H*124
*H H H*125
*H H H*126
*H H H*127
*9*128
*9*129
*9*130
*9*131
*1000*132
9

98. COALPORT.

99–104. COLEBROOK-DALE. The first three are the older marks. 102, adopted 1851. 103 is the modern mark, being a monogram of S. C., for Salopian, Colebrook-Dale, and including C, for Caughley or Coalport; S, for Swansea; and N, for Nantgarrow, the combined factories.

105. SHELTON. The *New Hall* factory. Modern marks of this factory are HACKWOOD, or HACKWOOD & Co., from 1842 to 1856; then C & H, *late Hackwood*, for Cockson & Harding; and since 1862 HARDING.

106–110. PINXTON.

111–132. WORCESTER. The early mark is the letter W, in various forms, as in 112. This stands for Worcester or Wall.

The crescent, also in different forms, as in 113, in blue, gold, or impressed, was used prior to 1793. It must not be mistaken for the crescent of Caughley, which it closely resembles, so that specimens can sometimes be identified only by the paste or the decorations.

The marks numbered 111 are workmen's marks. These do not identify specimens with certainty, as of Worcester, for similar marks are found on other porcelains.

The square marks, 114, 115, 116, are early marks, imitating Oriental.

Marks 117, 118, 119 are found on prints, and are the signatures of Robert Hancock, engraver. The anchor in 118 and 119 may be of Richard Holdship. See text.

The marks 120–126 are early marks, fanciful imitations of Chinese. Other marks occur, resembling these in character.

127, 128, 129, 130 are imitations of the crossed-sword mark of the Dresden factory.

131 is an imitation of the mark of Sèvres.

132 is an imitation of the mark of Chantilly.

133
FLIGHTS134
Flight136
B137

*Flight & Barr*138
Flight Barr & Barr.140
FBB141

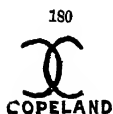
BARR FLIGHT & BARR.
Royal Porcelain Works.
WORCESTER.
London—House.
N.1 Coventry Street.142
*Chamberlains*143
CHAMBERLAINS147
*2*148
X
3149
+150
B*6*151
B₂152
X
b153
B₃154
B₇155
2
*X*156
+
A.1157
I-B159

+160
X
5161
X
4162
X
3163
+
*7*164
*↑*165
M166

M167

M170
SPODE173
**Spode's
Imperial**

- 133-146. WORCESTER (continued from previous page). Flight purchased the works (1783), and used his name, impressed (mark 133), or painted (134), sometimes with the crescent mark in blue. 133 and 134 were used till 1792. After the king's visit, in 1788, mark 135 was sometimes used.
136. Scratched mark of Barr after 1793.
137. Flight & Barr, 1793-1807.
- 138, 140. Flight, Barr, & Barr, 1807-'13. The F. B. B. impressed.
139. Impressed mark, used 1813-'40.
141. Printed mark, used 1813-'40.
142. Chamberlain, 1788 to about 1804.
143. Chamberlain, 1847-'50. Impressed or printed.
- A printed mark, *Chamberlain's Regent China, Worcester, etc.*, under a crown, was used from 1811 to about 1820.
- A written mark, *Chamberlains, Worcester, & 63 Piccadilly, London*, was used about 1814.
- A printed mark, CHAMBERLAINS, WORCESTER, & 155 NEW BOND ST. LONDON, under a crown, was used from 1820 to 1840. After the union of the two factories in 1840, the printed mark was CHAMBERLAIN & CO., 155 NEW BOND ST., & NO. 1 COVENTRY STREET, LONDON, under a crown.
- In 1847 the mark was simply *Chamberlain & Co., Worcester*.
- From 1847 to 1850 mark 143 was used.
- 144 was used 1850-'51.
145. Mark adopted by Kerr & Binns, 1851, and since used.
146. Kerr & Binns, on special work.
147. PLYMOUTH. In blue, red, or gold.
- 148-164. BRISTOL. The general mark is a cross (149), in slate-color, blue, or in the paste, with or without numbers and other marks. Numbers from 1 to 24 are thought to be of decorators. B, with a number (marks 151-154), was frequently used. 155 shows Bristol and Plymouth combined; 157, John Britain, foreman in the factory. 159 shows an embossed T over the cross in blue. The Dresden mark was frequently used, as in 160, 161, 162, 163, in combination with numbers, etc. 164 is probably a workman's mark.
- 165-169. STOKE. *Minton*. 165 is the earliest mark. 166, 167 are also early marks. 168 was used about 1850, and 169 later.
- 170-174. Stoke. Marks of Josiah Spode, father and son. 170 is an old mark, neatly pencilled in various colors.



182
CopeLand Late Spode



187
CAMBRIGAN

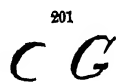
188
NANT-GARW
G.W.



192
ROGERS

193
Mason's Patent
Iron Stone China.

194
Opaque China
B and C



203
LEEDS POTTERY
LEEDS POTTERY



208
HERCULANEUM

209
WEDGWOOD



213
Wedgwood & Bentley

211
Wedgwood & Bentley

212
Wedgwood



- 175-183. Stoke. Marks of the several successors of Spode since 1833.
175. Copeland & Garret, 1833-'47.
176. Used by Copeland & Garret.
177. Copeland & Garret.
- 178, 179. Copeland & Garret, 1833-'47.
180. Copeland, 1847-'51.
181. Copeland, after 1851.
182. Copeland used, 1847-'67.
183. W. T. Copeland & Sons, after 1867.
184. ROCKINGHAM. Adopted about 1823. The mark of *Brameld* from 1807 was his name impressed, sometimes with a cross and four dots. Teapots have impressed marks: MORTLOCK, CADOGANS, MORTLOCK'S CADOGAN, ROCKINGHAM. Coffee-pots had sometimes the pattern name NORFOLK impressed.
- 185-187. SWANSEA. The name SWANSEA, stencilled or impressed, was used about 1815; also SWANSEA, DILLWYN & Co., and DILLWYN'S ETRUSCAN WARE. Marks 185, 186 are impressed, date unknown. 187 is on an old pottery vase. *Cambrian Pottery* also appears.
188. NANTGARROW, 1813-'20, painted, impressed, or stencilled. *Mortlock*, in gilt, occurs on ware decorated in London, and also on Swansea ware.
189. LONGPORT. *Davenport's* mark. The earliest mark was LONGPORT, or DAVENPORT LONGPORT. The marks are impressed or printed, and forms vary. After 1805, on iron-stone wares the anchor was in a portico.
190. LIVERPOOL. *Richard Chaffers*.
191. Liverpool. *Pennington*. In gold or colors.
192. Longport. *Rogers*. Pottery and iron-stone.
193. LANE DELPH. *C. J. Mason*. Various other marks, including the name. The oldest marks include the name, MILES MASON; a mark is MASON'S CAMBRIAN ARGIL; and a late mark, FENTON STONE WORKS, C. J. M. & Co.
194. TUNSTALL and BURSLEM. *Bridgwood & Clark*, 1857.
195. LONGTON. *Hilditch & Son*.
196. Tunstall. *Bowers?*
197. Longton. *Mayer & Newbold*.
- 198, 199. On Elers-ware teapots.
200. YARMOUTH. *Absolon*.
- 201, 202, 203. LEEDS. 201 is *Charles Green*.
204. LANE-END. *Turner*.
205. EDINBURGH (Portobello) pottery.
- 206, 207, 208. Liverpool. 206, 208 are Herculaneum pottery. Marks of this pottery are found impressed, painted, and printed on bottoms and sides of pieces. 207 is of *Case & Mort*, proprietors from 1833.
- 209-214. BURSLEM and ETRURIA. Marks of *Wedgwood* and his factory. The most common mark is the word WEDGWOOD, impressed. This is continued in use

at present, and old wares are distinguished from modern only by the work. Marks 211, 212 are old marks, never counterfeited, so far as known. The marks of Wedgwood & Bentley are rarely found except on good old work. A great variety of marks, scratched or impressed, are found on specimens, accompanying the name; those in forms of sections of a circle, as shown in 214, are supposed to characterize work from 1810-'20. Capital letters are common marks; but no significance attaches to them, except that in all cases where three capital letters occur on a piece Miss Meteyard says it is modern—since 1845. Miss Meteyard also says, "The letter O and the number 3—either separately or combined—always indicate the best period and the highest quality of ware." A very rare mark is "B & W."

Porcelain was marked with the name impressed and, more rarely, printed in color. See text, p. 332, for other information.

Other English wares are marked with names of makers, which will be found in the text. Initials are sometimes found, which may also be determined by reference to the *Alphabetical List of English Potters*, at pp. 385-387. The collector will discover many marks on English wares not catalogued, since tables are necessarily imperfect. Thus, since these tables were electrotyped, we have found wood impressed on pieces of a service, others of which have E. WOOD & SONS, showing the former to be an occasional mark used by this firm. We have also found printed pottery in dark blue, with landscapes, on which ADAM, WARRANTED STAFFORDSHIRE, is impressed in a circle around the American eagle. These wares are of about 1820, but the potter is unknown. Several English potters adopted the American eagle, printed in blue, as a mark, with or without their names accompanying it, and apparently on wares intended for the American market. All specimens which we have seen with this mark are later than 1815.

Engravers of prints rarely signed their work, and, except of Hancock and Sadler, signatures are almost unknown. A large pitcher in the T.-P. Collection, marked HERCULANEUM POTTERY, LIVERPOOL, has two prints, one representing "Commodore Preble's squadron attacking the city of Tripoli Aug. 3, 1804," the other a portrait of Commodore Preble, in an oval resting on a landscape, with cannon, a flag, an Indian woman, etc. The latter print, one of unusual excellence as an engraving, is signed D, but we have no knowledge of the engraver. Various signs, printed in blue, stars, squares, rosettes, chemical signs, etc., are found on printed wares, of whose meaning nothing is known.

MARKS ON PORCELAIN OF CHINA AND JAPAN.

SOME explanation of the Oriental marks has already been given in the text. It is repeated here, for convenience of reference.

Chinese marks are dates, mottoes expressive of good wishes, indications of the rank and quality of the persons for whose use the wares are intended, symbolic signs, etc. The method of dating is usually by the name of the dynasty and reign of the ruling sovereign. It is customary in China to give to each reign a name, such as "the brilliant," "the excellent," etc. So, also, with the dynasties. The "Ming" Dynasty means the "illustrious" dynasty. With the names of the dynasty and the reign sometimes occur two signs for two words—*nien* (years or period) *che* (made). Here, for example, is one of the marks of a period or reign in the Ming Dynasty. It commences in reading at the right hand, top, and is read downward as the signs are numbered, thus: 1, Ta; 2, Ming; 3, Ching; 4, Hwa; 5, Nien; 6, Che; which is, in English, 1, 2, Great Ming; 3, 4, Ching-hwa; 5, 6, period made; and means "made in Ching-hwa period of Great Ming Dynasty." The Emperor Tehu-ti reigned 1465-'87, and his reign was called the Ching-hwa period. It will be seen that the third and fourth of these signs are the name of the period. Accordingly, in the following Table we omit the dynasty signs and those signifying "period made," and give only the two characters which name the period. Porcelains having the "six marks," so called, of the period above given are more highly esteemed than any others. Those of the Yung-lo, Senen-tih, Kea-ting, and Wan-leih periods of the Ming Dynasty are also prized. All these are admirably counterfeited, with the marks, in modern times. Careful examination and comparison with the mark given in the Table are necessary; for Chinese workmen were not always skilful writers, and the same mark, written by different hands, varies quite as much as English handwriting.

Another class of Chinese marks are seal marks. These are in characters used only for such purposes, and the signs are of similar value to those in the six marks.

The example here given reads, "Made in the period of Kien-long (1736-'95) of the Thsing Dynasty. Potters' names and factory marks rarely occur on Chinese ware. Square marks, resembling seal marks, but illegible, are common.



The various symbolic marks on Chinese wares are but little understood, as we know little of the Chinese civilization. It is supposed that some forms, occurring more frequently in the decorations of pieces, have reference to the class of people for whom the wares were made.

Japanese marks are rare on old specimens. Dates are on the same system with the Chinese. On both wares marks are sometimes impressed, but usually painted in color. Most of the Japanese marks in the Tables are found on modern fabrics.

MARKS, ETC., ON PORCELAIN OF CHINA.

Marks of Periods.

明大	<i>Ta Ming Dynasty,</i> 1368-1647.
武洪	Hung-woo, 1368.
文建	Keen-wan, 1399.
樂永	Yung-lo, 1403.
熙洪	Hung-he, 1425
德宣	Seuen-te, 1426.
統正	Ching-thung, 1436.
泰景	King-tae, 1450.
順天	Theen-shun, 1457.
化成	Ching-hwa, 1465.
治弘	Hung-che, 1488.
德正	Ching-tih, 1506.






Marks of Periods


靖嘉	Kea-ting, 1522.
慶隆	Lung-king, 1567.
歷萬	Wan-leih, 1573.
昌泰	Tae-chang, 1620.
啓天	Theen-khe, 1621.
禎崇	Tsung-ching, 1628
光弘	Tsung-kwang, 1644
武紹	Shaou-woo, 1646.
武隆	Lung-woo, 1647.
曆永	Yung-leih, 1647.
清大	<i>Tu Thsing Dynasty,</i> 1616-1861.






Marks of Periods.

命天	Theen-ming, 1616.
聰天	Theen-ting, 1627.
德崇	Tsung-te, 1636.
始順	Shun-che, 1644
熙康	Kang-he, 1662.
正雍	Yung-ching, 1723
隆乾	Kien-long, 1736.
慶嘉	Kea-king, 1796.
光道	Taou-kwang, 1821.
豐咸	Han-fung, 1851.
治同	Thung-she, 1861.

MARKS IN THE SEAL CHARACTER.

	Shun-chee, 1644.
	Kang-he, 1662.
	Yung-ching, 1723
	Kien-long, 1736.
	Kea-king, 1796.

	Taou-kwang, 1822.
	Han-fung, 1851.
	Thung-che, 1861.
	Ching-hwa, 1465. Forgery on modern work.
	Shun-che, 1644. Another form of four marks.

	Kien-long, 1736. Another form.
	Taou-kwang, 1822. Another form.
	Han-fung, 1851. Another form.
	Thung-che, 1861. Another form
	Thung-che. Name only.

Marks, Symbols,
etc.

Three forms of the two-fish mark, found on old blue ware: one of the earliest known, from 969-1106.



The sesamum flower. Various flower marks are found, in ancient and modern periods.



Hua: a small flower inside a cup. Marks the Yung-lo period, 1403-1424.



Butterfly.



Shou: long life; a wish for longevity, common in one or another of these and other forms on porcelain: sometimes re-

Marks, Symbols,
etc.

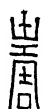
peated a hundred or more times. Such pieces are called "hundred show."



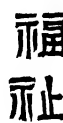
Circular show mark.



Oval show mark.



Thin form of show.



Fuh-che: happiness.

Marks, Symbols,
etc.

Fuh-che: happiness.

Luh: wealth.

Keih: good luck.

Yuh: a gem; precious thing.

Wan: literature

Hing: flourishing.

Ke: a vessel; vase; ability.

Paou: precious.

Ting: perfect.

Tsuen: perfect, a name.

King: good wishes.

A name.

Woo-fuh: the five blessings—long life, health, riches, love of virtue, a natural death.

Woo-chin: the five blessings.

Chin-yuh: precious gem.

Marks, Symbols,
etc.

Yuh-chin: precious gem

Wan-yuh: beautiful gem

Chin-wan: valuable rarity.

Ta-keih: prosperity, good luck.

Choo-foo: a polite expression in China. Mark used 1260-1367

Keang-tang: preserved ginger Used 1522-1566.

Tsaou-tang: preserves, chow-chow. Used 1522-1566.

Tung-gan, a name.

Yung-ching, a name.

Tsaie Jun } Made for the brilliant
tang che } hall of the middle.Wei }
foo } Made to add to the jas-
ching } per.Jin }
ho } Hall of brotherhood.
kwan }

Marks, Symbols, etc

奉先堂	{ Fung } { seen } { tang }	Hall of ancestors.
堂奇製玉	{ Tang Khe } { che yuh }	Made for hall of wonderful beauty.
堂偵德製	{ Tang Ching } { che ti }	Made for hall of virtuous study.
堂珮玉製	{ Tang Pi } { che yuh }	Made for hall of jewelled girdle.
堂紫刺製	{ Tang Tze } { che tze }	Made for hall of violet embroidery.
堂敬畏製	{ Tang King } { che wei }	Made for hall of worship.
長富春佳玉翠堂	{ Kea Yuh } { ke tang }	Beautiful vase for hall of gems.
	{ Chang Fuh } { chun kwei }	Wealth, honor, long youth.
長富命貴	{ Chang Fuh } { ming kwei }	Wealth, honor, long life
賜天福	{ Tze Teen } { fuh kwan }	Heaven grant happiness.
如奇五珍	{ Jou Khe } { woo chin }	Wonderful as the five precious things

Marks, Symbols, etc

如奇玉珍	{ Jou Khe } { yuh chin }	Wonderful gem, resembling a jewel.
如奇玉玩	{ Jou Khe } { yuh wan }	Same signification.
雅聖集友	{ Ya Ching } { tsei yu }	Remarkable meeting of philosophers and friends.
珍博玩古	{ Chin Poo } { wan ku }	Valuable curiosity for antiquaries.
宝文鼎玉	{ Paou Wan } { ting yah }	Elegant, perfect, precious ting; metal incense-pot.
山文斗章	{ Shan Wan } { tow shang }	Compliment; comparing to a mountain and the North-star
雅美製玉	{ Ya Mei } { che yuh }	Made for one who knows gems
萬壽無疆	{ Wan show woo keang }	an unlimited long life.
壽	{ Wan } { show } { woo } { keang }	Same This is in the seal character.
江鳴	{ Keang ming kaou (name); tsaou (maker). }	

Marks, Symbols,
etc.祥萬
製明Wan ming cheang (name) che
(made).御雍
製正Yung ching yu che: made for
Yung ching.奇連
后成Leen ching khe how (not trans-
lated).珍若
藏深Jo shin chin tsang: precious
property; Jo shin (name).珍若
藏深

Same mark.

珍若
藏深

Same mark.

鼎奇
之石
珍寶Ting Khe }
che she } Ting of very precious
chin paou } and costly stone.鼎奇
之玉
珍寶Ting Khe }
che yuh } Same meaning.
chin paou }玉忠
雅有
製美Yuh Chung }
ya yuh } For the true-heart-
che mei } ed, elegant gem
made.福壽
如比
東南山Long life as the south mountain.
Happiness like the east sea.Marks, Symbols,
etc.Badge of authority, on pieces for
mandarinsTablet of honor, including the Swas-
tika. (See text.)

Another form of the same.



Another form.



A mandarin mark of honor.



The sounding-stone. (See text.)



Another sounding instrument.



Sacred axe. (See text.)



Shell (see text) or helmet (?).



Shell (?).



Shell (?).



Standard table.



Leaves. Frequent marks.

Treasures of writing, stone for
ink, brushes for writing, a roll
of paper, etc. Found as a
mark; and common, as are
many of the previous designs,
in the surface decorations of
porcelains.

Marks, Symbols, etc



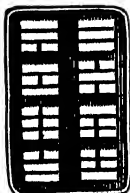
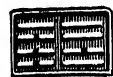
Beautiful vase for the wealthy and noble. (Otherwise translated: wealth, honors, and intellect.



Probably a name



Valuable vase for divining.



These three combinations, or arrangements of lines, known as the eight diagrams of Fuh-hi, frequently occur on Chinese porcelain. They have reference to certain mystic ideas, utterly unintelligible to us, relating to the genders, the principles of creation, the origin of all things, etc., etc. Chinese philosophers profess to understand their meaning and suggestions, and the Chinese regard them as talismanic.

Marks, Symbols, etc.



Bamboo leaves, used as a mark at King-te-chin, 1573-1619. We have also found the leaves used as an exterior decoration of porcelain dishes which we believe to be Persian.



Square marks, common on old specimens, in these and many other forms.



Paou. precious.

MARKS ON JAPANESE POTTERY AND PORCELAIN.

Marks of Periods.

德建	Ken-tok, 1370.
中文	Bun-tin, 1372.
授天	Ten-du, 1375
和弘	Ko-wa, 1380.
中元	Gen-tin, 1380.
四德明	Mei-tok, 1393.
永應	O-yei, 1394.
長正	Show-tiyo, 1428.
享永	Yei-kiyo, 1429.
吉嘉	Ka-kitsu, 1441.
安文	Bun-an, 1444.
德宝	Ho-tok, 1449.
德亨	Kiyo-tok, 1452.
正康	Ko-show, 1455.
祿長	Chiyo-rok, 1457.
正寛	Kwan-show, 1460.
正文	Bun-show, 1466.
仁應	O-nin, 1467
明文	Bun-mei, 1469.
亨長	Chiyo-kiyo, 1487.
德延	En-tok, 1489.
應明	Mei-o, 1492.
龜文	Bun-ki, 1501.


Marks of Periods


正永	Yei-show, 1504.
永大	Dai-jei, 1521.
祿亨	Kiyo-rok, 1528.
永大	Di-yei, 1532.
治弘	Ko-dsi, 1555
祿永	Yei-rok, 1558.
龜元	Gen-ki, 1570.
正天	Ten-show, 1573.
祿文	Bun-rok, 1592.
長慶	Kei-chiyo, 1596.
和元	Gen-wa, 1615.
永寛	Kwan-jei, 1624
保正	Show-ho, 1644.
安慶	Kei-an, 1648
應承	Show-o, 1652.
曆明	Mei-reki, 1655.
治萬	Man-dsi, 1658.
文寛	Kwan-bun, 1661.
寶延	Yen-po, 1673.
和天	Ten-wa, 1681.
享貞	Tei-kiyo, 1684.
祿元	Gen-rok, 1688.
永寶	Ho-yei, 1704.


Marks of Periods

德正	Show-tok, 1711
保享	Kiyo-ho, 1717.
文元	Gen-bun, 1736.
保寛	Kwan-po, 1741.
享延	Yen-kiyo, 1744
延寛	Kwan-jen, 1748.
曆寶	Ho-reki, 1751.
和明	Mei-wa, 1764.
永安	An-jei, 1772.
明天	Ten-mei, 1781.
政寛	Kwan-sei, 1789.
和享	Kiyo-wa, 1801.
化文	Bun-kwa, 1804.
政文	Bun-sei, 1818.
保天	Ten-po, 1834.
化弘	Ko-kua, 1844.
永嘉	Ka-yei, 1848.
久文	Bun-se, 1854.
治元	Man-yen, 1860.
應慶	Bun-kin, 1861.
治明	Gen-di, 1861
政安	Kei-o, 1865.
延萬	Mei-di, 1868.


Enamel Marks.


 } Enamel mark. Forgery (?) of Chinese date 1615

 } Di-Nipon · Great Japan.
Han-suki, maker. (Enamel.)

 } Nipon : Japan. Next signs illegible.
Eurok, maker. (Enamel.)


Awata Potteries.


 } Great Japan.
Dioto, maker.

 } Tokio, name of factory; and
Maker's names.

 } A-e-rako, a name.

 } Ki-yo, a name.

 } Yu-ah-su-zan, a name.


 } Awata.

Banko Potteries.


 } Banko.

 } Banko.

Banko Potteries.

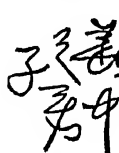
 } Nipon, Japan.
Ari-nori, name.

 } Banko

 } Shing-en, a name.

 } Banko.

 } Banko.


 } Banko eminent of flowers.

 } Banko, an old mark.

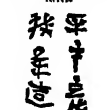
 } Guso, name.

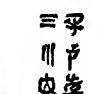
 } Maker's mark.

Bishu Porcelain

 } Bishu.

Hiradoson Porcelain.

 } Hiradoson.
Shi-ac, maker.

 } Hiradoson, and
maker's name.

Hezen Porcelain

肥前 } Hezen, or Fisen.

肥州 } He-shu.

田肥 }
 力前 } Hezen :
 三有 } Haritikami, maker.

信肥 }
 甫傍 } Hezen :
 造山 } Shinpo, maker.

肥州 }
 硃山 } Hezen :
 造山 } Reksen, maker.

西肥 }
 南里製 } West Hezen :
 田 } Nan-di, maker.

石肥 }
 太前 } He-shu (Hezen) :
 造田 } Tentai, maker.
 Haridan, factory

The following are Hezen factory villages.

山内河大 Great mountain between rivers

山内河三 Three mountains between rivers.

山泉和 Mountain of springs.

平高文 Beautiful upper plain.

平野本 Beautiful chief plain.

平野中 Middle plain.

平長 Long plain.

Hezen Porcelain

郎大 Great vase.

郎中 Medium vase.

川白 White stream.

町赤 Street of painters in red.

屋岩 The cave.

馴南 South bank.

尾田 Outside tail.

田毛黒 Black field.

瀬廣 Firo-se.


瀬一 Itche-na-se.

左井 Imah.

Kaga Pottery and Porcelain.

九谷 } Kutani: the nine valleys.

九谷 } Kutani.

 Kutani.

 Made at Kutani.

九谷造 } Made at Kutani.

九加陽 } Kagayo Kutani.

九加陽 } The same.

九加陽 } The same.

Kaga Pottery and
Porcelain.

九
考
紫

Kagayo Kutani.

大
日本
九
谷
製

Great Japan, made at Kutani.

九
谷
本
山

Kutani Bok-zan.



Kutani: Touzan.



Porcelain Mountain (Touzan).



Rising-sun Mountain.



Ponzan.



Dio, maker.



Great Japan; Garden Mountain;
strong pottery.



To-o.

九
谷
製
加
長
軒

Made at Kutani, long house.



Kutani.

Kaga Pottery and
Porcelain



Long life.



Happiness.



Riches.

Kioto Pottery.

京
都

Kioto.

錦
江
京
都
製

Kioto, Japan, Kinkousan,
maker.

錦
造

Kinkousan, maker.

Satsuma Pottery.



Itsigaya, a place.

Tai-zan, maker.



Tai-zan.

帯
山

Tai-zan.

帯
山

Tai-zan.



Den-ko, name.

Shiba (Tokai) Pottery.

車
馬
主
乃
九

Hikomakoro, maker at Sie-un-
tei, in Shiba.

青
漆
彦
乃
九

Unknown.

Awari Porcelain.

尾
張

Awari.

暗
月

Saeng-ets: beautiful moon;
name of celebrated painter.

相
戸

Ai-we, name.

春
山
集

Spring Mountain.

山
本
周
旦

Painter's name (Yama-moto
Sho-tan).

Symbols, Incriptions, Names, etc.

寿

Long life.



Long life.

Symbols, Incriptions, Names, etc.



Happiness.



Wealth.



So-o.

青
龍

Kami, maker.

造
子

Rakou-masa, maker.

嗣
徳

Huzi-nori, name.

珍
若
藏

Imitation of Chinese marks
"Precious property of Jo-
shin."

心
芳
房

Shin-fo-se-seki, name.

會
七
寶
社

Seven honorable societies.

吟
晉
館
靜

Hall of increase of peace, har-
mony.



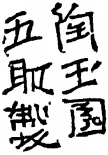

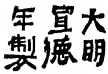


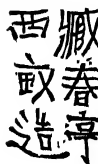
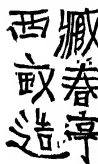
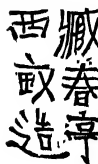
長
富
春
貴

Wealth, honors, and long youth.

長
富
命
貴

Wealth, honors, and long life.

Symbols, Incriptions, Names, etc.

	}	Wealth, honors, and long life.
		
	}	The same; maker's name (Gos-ki) added
		
	}	Chinese mark of 1426 on Hezen ware.
		
	}	Great Japan; Hirak, maker.
		
	}	Pavilion of Spring. Tsi-tze, maker.
		

Symbols, Incriptions, Names, etc

	}	Same factory name. Sanfo, maker. These are on Nagasaki wares.
		
		Hata, factory.
		Middle mountain
		Itsi-yama.
	}	These, and many other square marks, are found on blue painted wares.
		
		
		

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